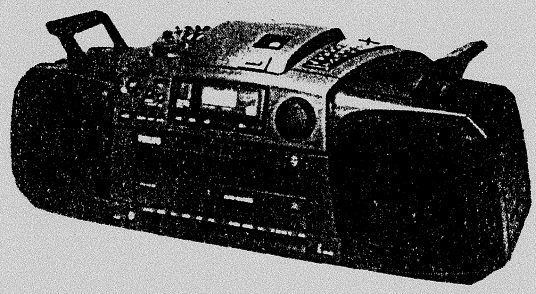
CD Stereo Radio Recorder AZ8404

/00/05

Service
Service
Service



Service Manual

For repair information of the cassette mechanism
see Service Manual of Recorders tape deck RDR-6

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(SF) Varo!
Avattaessa ja suojalukitus ohitettaessa olet alttiina näkymättömälle lasersäteilylle. Älä katso säteeseen.

(S) Varning!
Osynlig laserstrålning när denna del är öppnad och spärren är urkopplad.
Betrakta ej strålen.

CLASS 1
LASER PRODUCT
3122 110 03420

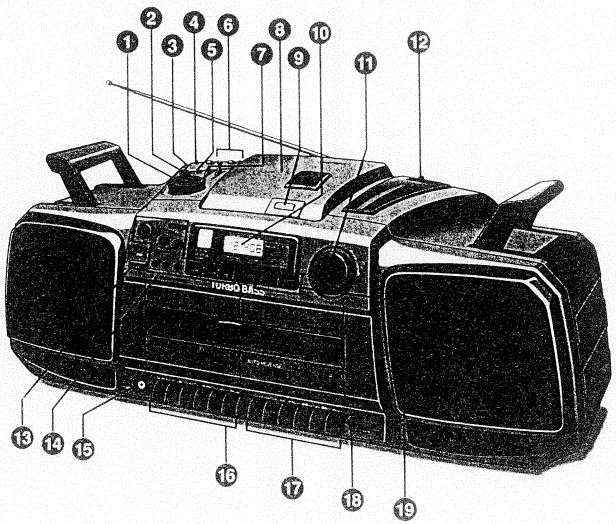
Documentation Technique Service Dokumentation Documentazione di Servizio Huolto-Ohje Manual de Servicio Manual de Serviço

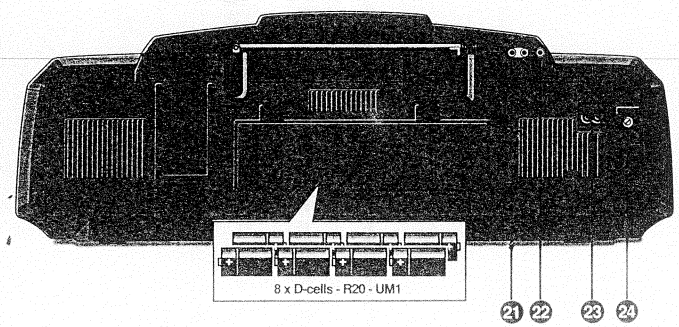
"Pour votre sécurité, ces documents doivent être utilisés par des spécialistes agréés, seuls habilités à réparer votre appareil en panne".

Subject to modification
4822 725 22983
Printed in The Netherlands

PHILIPS

CONNECTIONS AND CONTROLS





1	Volume control	3540	11	Tuning Control	2100
2	TBG Control	3596	12	Band Selector	1100
3	FM Stereo Indicator	6640	13	Power Switch	1302
4	Mono/Stereo Selector	1532	14	CD Control	
5	HS Dubbing Selector	1533	15	Headphone Socket	1303
6	Mode		16	Tape Control 1	
	tuner selector	1531A	17	Tape Control 2	
	tape selector	1531B	18	Auto Reverse Mode	
	CD selector	1531C	19	Auto Reverse Indicator	6464,6465
7	Graphic Equalizer	3508,3509	21	CD Output	1542,1592
8	CD Player		22	Mic Socket	1541
9	CD Eject		23	AC Mains Socket	1301
10	Display	7401	24	Not Applicable	

SPECIFICATION

GENERAL

Mains voltage	: 120V - 220V - 240V
Mains selection/setting	: Serviceable: set at 220V for -/00 set at 240V for -/05
Mains frequency	: 50Hz - 60Hz
Battery	: 12V (R20 x 8)
Power consumption	: 60W max.
Dimension (W x D x H)	: 680 x 231 x 220mm
Weight	: 6.8kg

TUNER : FM SECTION

Tuning range	: 87.5MHz - 108MHz
IF frequency	: 10.7MHz
Sensitivity at 26dB S/N	: <6µV
Selectivity at 600kHz bandwidth	: >20dB
IF rejection	: >50dB
Image rejection	: >20dB

TUNER : AM SECTION

Tuning range	SW	: 5.95MHz - 17.9MHz
	MW	: 526.5kHz - 1606.5kHz
	LW	: 148.5kHz - 283.5kHz
IF frequency		: 468kHz
Sensitivity at 26dB S/N	SW	: <250µV
	MW	: <2.5mV/M
	LW	: <4.0mV/M
Selectivity at 18kHz bandwidth	SW	: >16dB
	MW	: >16dB
	LW	: >18dB
IF rejection		: >50dB
Image rejection	SW	: >6dB
	MW	: >28dB
	LW	: >30dB

AMPLIFIER

Output power (D = 10%)	Mains	: 2 x 4.5W -1dB Left/Right 1 x 8W -1dB bass boost
	Battery	: 2 x 3.5W -1dB Left/Right 1 x 8W -1dB bass boost
Speaker impedance		: 2 x 4Ω with piezo 1 x 8Ω bass boost
Frequency response within -3dB	L/R	: 100Hz - 8kHz
	Bass boost	: 30Hz - 100Hz
Equalizer control		: -6dB to +6dB
Microphone sensitivity at 10kΩ		: <800mV
Headphone output at 32Ω		: 13mW
CD output at 4.7kΩ		: 800mV

CASSETTE RECORDER

Number of tracks		: 2 x 2 stereo
Tape speed		: 4.76 cm/sec ± 2% 2 x 4.76 cm/sec
Wow and flutter		: <0.35%
Fast-wind time C60		: 130 sec
Bias system	AM	: DC bias
	Others	: 57kHz ± 10kHz
Rec playback frequency response within -8dB		: 250Hz - 2kHz (AM) 250Hz - 5kHz (HS Dubbing) 250Hz - 6.3kHz (others)
Signal to Noise ratio	FM Rec	: >40dB
	AM Rec	: >22dB
	Mic Rec	: >30dB
	Dubbing	: >37dB

COMPACT DISC

Frequency response within +2dB/-4dB	: 20Hz - 20kHz
Signal/Hiss ratio	: >80dB
Distortion at 1kHz	: <0.5%
Channel difference at 1kHz	: <2dB
Channel crosstalk at 1kHz	: -50dB
De-emphasis	: 0 or 15/50 uS (Switched by subcode on the disc)

Carbon film 0.2 W CR16	70°C	5%	
Carbon film 0.33 W CR25	70°C	5%	
Carbon film 0.5 W CR37	70°C	5%	
Standard film 0.5 W SFR16T	70°C	5%	
Standard film 0.4 W SFR25	70°C	5%	
Metal film 0.6 W MRS25	70°C	5%	
Safety resistor			
(C) Chip component			

Plate ceramic Tuning < 120 pF	2%
Plate ceramic Others	−20/+80%
Tubular ceramic	
Polystyrene film / foil	1%
Polyestor Film / foil	10%
Mylar	10%
Electrolytic	

*a	= 2.5 V
b	= 4 V
c	= 6.3 V
d	= 10 V
e	= 16 V
f	= 25 V
g	= 40 V
h	= 63 V
j	= 100 V
l	= 125 V
m	= 150 V
n	= 160 V
q	= 200 V
r	= 250 V
s	= 300 V
t	= 350 V
u	= 400 V
v	= 500 V
w	= 630 V
x	= 1000 V
A	= 1.6 V
B	= 6 V
C	= 12 V
D	= 15 V
E	= 20 V
F	= 35 V
G	= 50 V
H	= 75 V
I	= 80 V

26338

(GB) WARNING

All ICs and many other semi-conductors are susceptible to electrostatic discharges (ESD). Careless handling during repair can reduce life drastically.
When repairing, make sure that you are connected with the same potential as the mass of the set via a wrist wrap with resistance. Keep components and tools also at this potential.

(F) ATTENTION

Tous les IC et beaucoup d'autres semi-conducteurs sont sensibles aux décharges statiques (ESD).
Leur longévité pourrait être considérablement écourtée par le fait qu'aucune précaution n'est prise à leur manipulation.
Lors de réparations, s'assurer de bien être relié au même potentiel que la masse de l'appareil et enfiler le bracelet serti d'une résistance de sécurité.
Veiller à ce que les composants ainsi que les outils que l'on utilise soient également à ce potentiel.

ESD

(D) WARNUNG

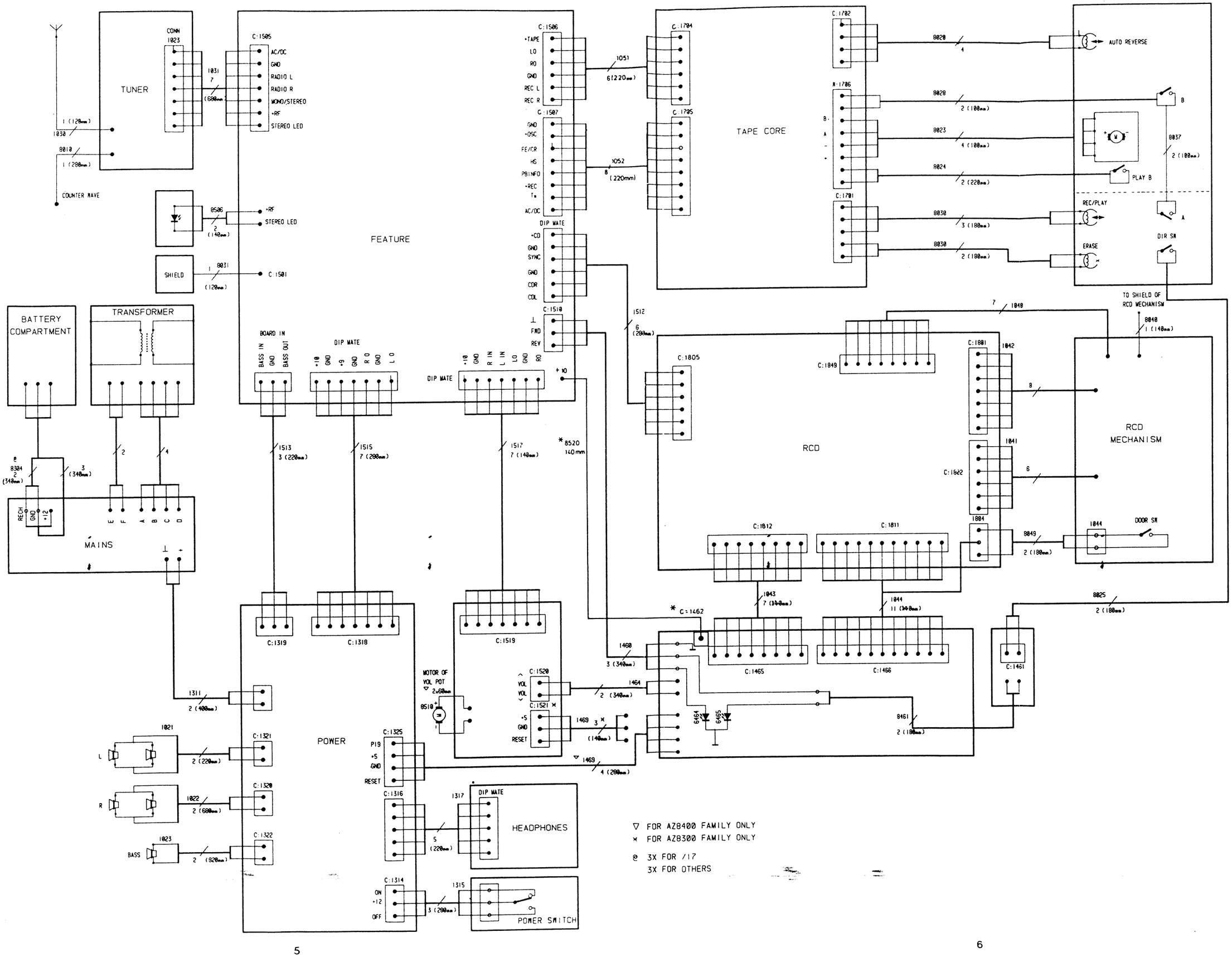
Alle ICs und viele andere Halbleiter sind empfindlich gegenüber elektrostatischen Entladungen (ESD).
Unsorgfältige Behandlung im Reparaturfall kan die Lebensdauer drastisch reduzieren.
Veranlassen Sie, dass Sie im Reparaturfall über ein Pulsarmband mit Widerstand verbunden sind mit dem gleichen Potential wie die Masse des Gerätes.
Bauteile und Hilfsmittel auch auf dieses gleiche Potential halten.

(NL) WAARSCHUWING

Alle IC's en vele andere halfgeleiders zijn gevoelig voor electrostatische ontladingen (ESD).
Onzorgvuldig behandelen tijdens reparatie kan de levensduur drastisch doen verminderen.
Zorg ervoor dat u tijdens reparatie via een polsband met weerstand verbonden bent met hetzelfde potentiaal als de massa van het apparaat.
Houd componenten en hulpmiddelen ook op ditzelfde potentiaal.

(I) AVVERTIMENTO

Tutti IC e parecchi semi-conduttori sono sensibili alle scariche statiche (ESD).
La loro longevità potrebbe essere fortemente ridatta in caso di non osservazione della più grande cauzione alla loro manipolazione.
Durante le riparazioni occorre quindi essere collegato allo stesso potenziale che quello della massa dell'apparecchio tramite un braccialetto a resistenza.
Assicurarsi che i componenti e anche gli utensili con quali si lavora siano anche a questo potenziale.



▽ FOR AZ8400 FAMILY ONLY
* FOR AZ8300 FAMILY ONLY

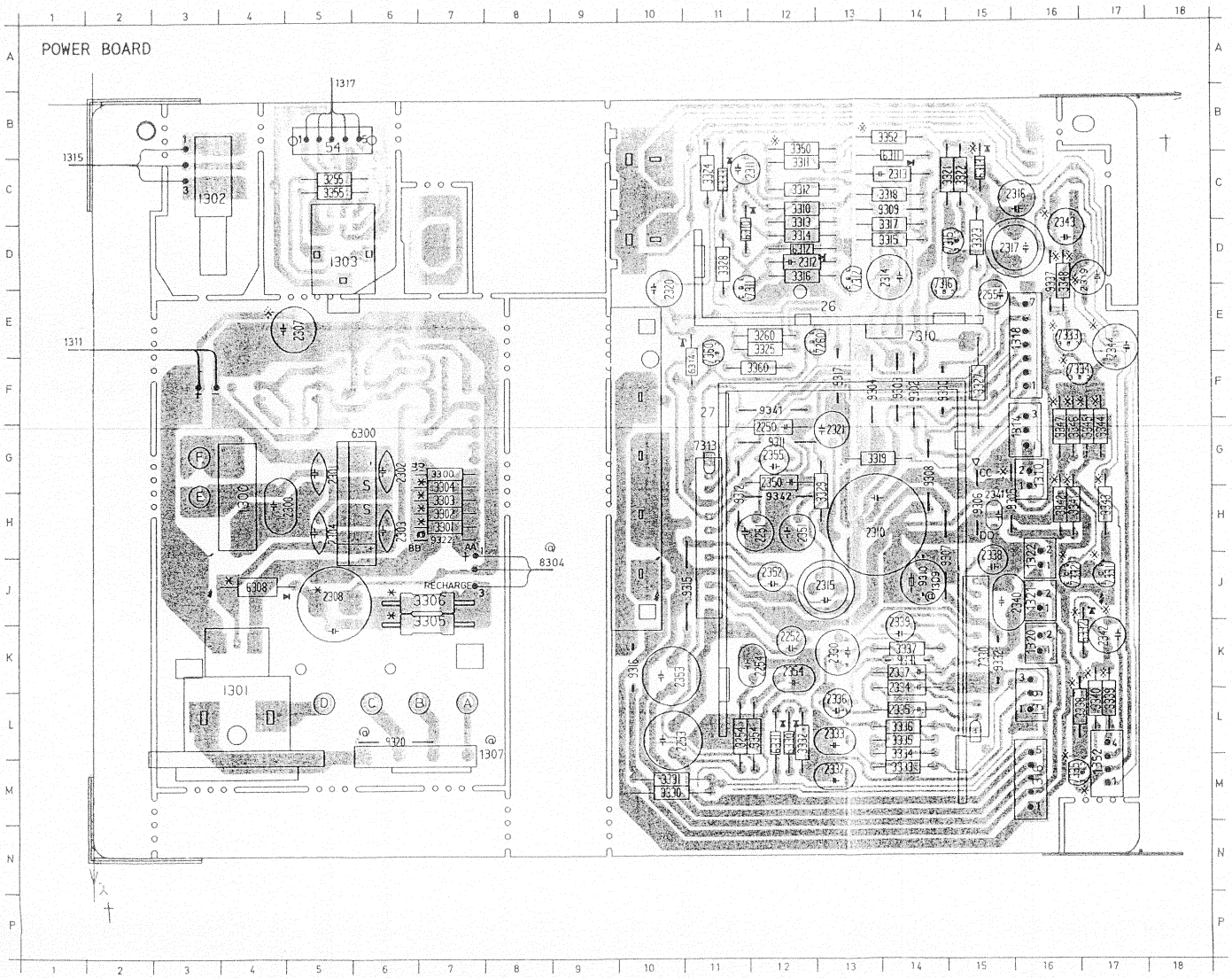
@ 3X FOR /17
3X FOR OTHERS

POWER BOARD DIAGRAM

S/ASSY	VERSION	ITEM MARKED @				CONNECTIONS	
		1307	/SETTING	1300	1309	2307	AA-BB	CC-DD
3139 118 82278	AZ8400/17	ADD	/120	T3.2A	–	ADD	OPEN	OPEN
3139 118 82288	AZ8401/01 AZ8400/13	ADD	/220	T2.5A	ADD	ADD	SHORT	OPEN
3139 118 82308	AZ8400/10 AZ8404/00 AZ8404/05	–	–	T2.5A	ADD	ADD	SHORT	OPEN
3139 118 82398	AZ8300/17	ADD	/120	T3.2A	–	–	OPEN	SHORT
3139 118 82418	AZ8300/13 AZ8301/01	ADD	/220	T2.5A	ADD	–	SHORT	SHORT
3139 118 82428	AZ8300/10 AZ8304/00 AZ8304/05	–	–	T2.5A	ADD	–	SHORT	SHORT

1300 H13
1301 H15
1302 G10
1303 D12
1307 E14
1309 A6
1310 H8
1311 H9
1314 G8
1315 G9
1317 C9
1318 D1
1319 A10
1320 B9
1321 C9
1322 B9
1325 K8
2251 E5
2252 E6
2253 E7
2254 E7
2255 E3
2300 H13
2301 H12
2302 J12
2303 H12
2304 J12
2307 J10
2308 K11
2310 K4
2312 L3
2313 K1
2314 K1
2315 F5
2316 H5
2317 H2
2320 F3
2321 G5
2330 C6
2332 B4
2333 B4
2334 B5
2335 B5
2336 C6
2337 C6
2338 B7
2339 C7
2340 B7
2341 B7
2342 K6
2344 H4
2350 F4
2351 F5
2352 F6
2353 F7
2354 F7
2355 F3
2550 E4
3251 H3
3251 E5
3254 E7
3255 E12
3260 E4
3300 K10
3301 K10
3302 K10
3303 K10
3304 K10
3305 K11
3306 K11
3310 L4
3311 K5
3312 K5
3313 K5
3314 K5
3315 K2
3316 L2
3317 K2
3318 L1
3319 G6
3322 H2
3323 G3
3324 F3
3325 F3
3327 G3
3328 L2
3329 F6
3330 A3
3331 A3
3332 B3
3333 B4
3334 B5
3335 B5
3336 B5
3338 J6
3340 K6
3341 K5
3342 K5
3343 K6
3344 K5
3345 K5
3346 K5
3347 K4
3348 K7
3349 K6
3350 H5
3351 F5
3352 H4
3354 F7
3355 D12
3360 F4
5000 H14
6300 H12
6308 J11
6310 K3
6311 K2
6312 K3
6313 H3
6314 F3
6330 B3
6331 B4
6332 K6
6333 H5
7260 E4
7310 J3
7311 L3
7312 K2
7313A E6
7313B F6
7315 H2
7316 G2
7330A B6
7330B C6
7331 J5
7332 J5
7333 L6
7334 L5
7335 J6
7360 F4
2250 E4
2319 M7

26	E13	1311	E1	1352	M17	2303	H6	2316	C16	2337	K14	2352	J12	3303	H7	3316	D12	3328	D11	3338	L16	3348	G16	6312	D12	7312	D13	7360	E11	9309	C14	9332	K15
27	F11	1314	G16	2250	G12	2304	H5	2317	D15	2338	J15	2353	K10	3304	G7	3317	D14	3329	H13	3339	L17	3350	B12	6313	C15	7313	G11	8304	JR	9310	J14	9337	E16
54	B5	1315	B1	2251	H12	2307	E5	2320	E10	2339	J14	2354	K12	3305	J7	3318	C14	3330	H10	3340	L17	3352	B14	6314	F11	7315	D15	9300	F14	9311	G12	9341	F12
1300	H4	1316	M16	2252	K12	2308	J5	2321	G13	2340	J16	2355	G12	3306	J7	3319	G13	3331	M10	3341	H16	3354	L12	6330	L12	7316	D14	9302	F14	9312	H11	9342	H12
1301	K4	1317	A5	2253	L10	2310	H13	2330	K13	2341	H15	3254	L11	3310	C12	3321	C15	3332	L12	3342	H16	3355	C5	6331	L12	7330	K15	9303	F14	9315	J11	2319	E17
1302	C3	1318	E16	2254	K12	2311	C11	2332	M13	2342	K17	3255	C5	3311	C12	3322	C15	3333	H14	3343	H17	3360	F12	6332	K17	7331	J17	9304	F13	9316	K10		
1303	D5	1319	L16	2255	E15	2312	D12	2333	L13	2343	D16	3260	E12	3312	C12	3323	D15	3334	L14	3344	G17	6300	G6	6333	C11	7332	J16	9305	H15	9317	F13		
1303	J14	1320	K16	2300	H5	2313	C14	2334	K14	2344	E17	3300	G7	3313	C12	3324	C11	3335	L14	3345	G17	6308	J4	7260	E13	7333	E16	9306	H15	9320	L6		
1307	L8	1321	J16	2301	G5	2314	D14	2335	L14	2350	G12	3301	H7	3314	D12	3325	E12	3336	L14	3347	G16	6310	D11	7310	E14	7334	F16	9307	J14	9322	H7		
1310	G16	1322	J16	2302	G6	2315	J13	2336	L13	2351	H12	3302	H7	3315	D14	3327	F15	3337	K14	3348	E16	6311	B14	7311	E11	7335	M16	9308	G14	9331	K14		



NOTE

ITEM MARKED ✳ FOR -/17 ONLY
ITEM MARKED ※ FOR AZ8400 FAMILY ONLY
ITEM MARKED ▽ FOR AZ8300 FAMILY ONLY

VERSIONS	ITEM MARKED @					
	1307	8304	9320	9322	1309	9310
AZ8300/17 AZ8400/17	ADD	3W	DEL	DEL	DEL	ADD
AZ8300/13 AZ8301/01 AZ8400/13, AZ8401/01	ADD	2W	DEL	ADD	ADD	DEL
AZ8300/10 AZ8304/00, -/05 AZ8400/10 AZ8404/00, -/05	DEL	2W	ADD	ADD	ADD	DEL

TRANSFORMER CONNECTION

VERSIONS	A	B	C	D	E	F
AZ8304/00, AZ8300/17 AZ8301/01 AZ8404/00 AZ8400/17, AZ8401/01	RED	BRN	ORG	BLK	YW	BLU
AZ8300/10 AZ8304/00 -/05 AZ8400/10 AZ8404/00 -/05	BRN	RED	ORG	BLK	YW	BLU
AZ8300/13 AZ8400/13	—	ORG	—	BLK	YW	BLU

+1 : 12V

+6 : 5.4V

+9 : 8.4V

+10 : 9.6V

7310	7311	7312
e : 11.9V	e : 0V	e : 4.7V
b : 11.2V	b : 0.6V	b : 4.1V
c : 9.6V	c : 10.9V	c : 1.3V

7315	7316	7331
e : 8.4V	e : 11.4V	e : 12.0V
b : 9.1V	b : 10.8V	b : 11.2V
c : 10.8V	c : 8.4V	c : 11.9V

7332	7333	7334
e : 12.0V	e : 0.7V	e : 0V
b : 11.2V	b : 1.3V	b : 0.7V
c : 11.9V	c : 0.7V	c : 0V

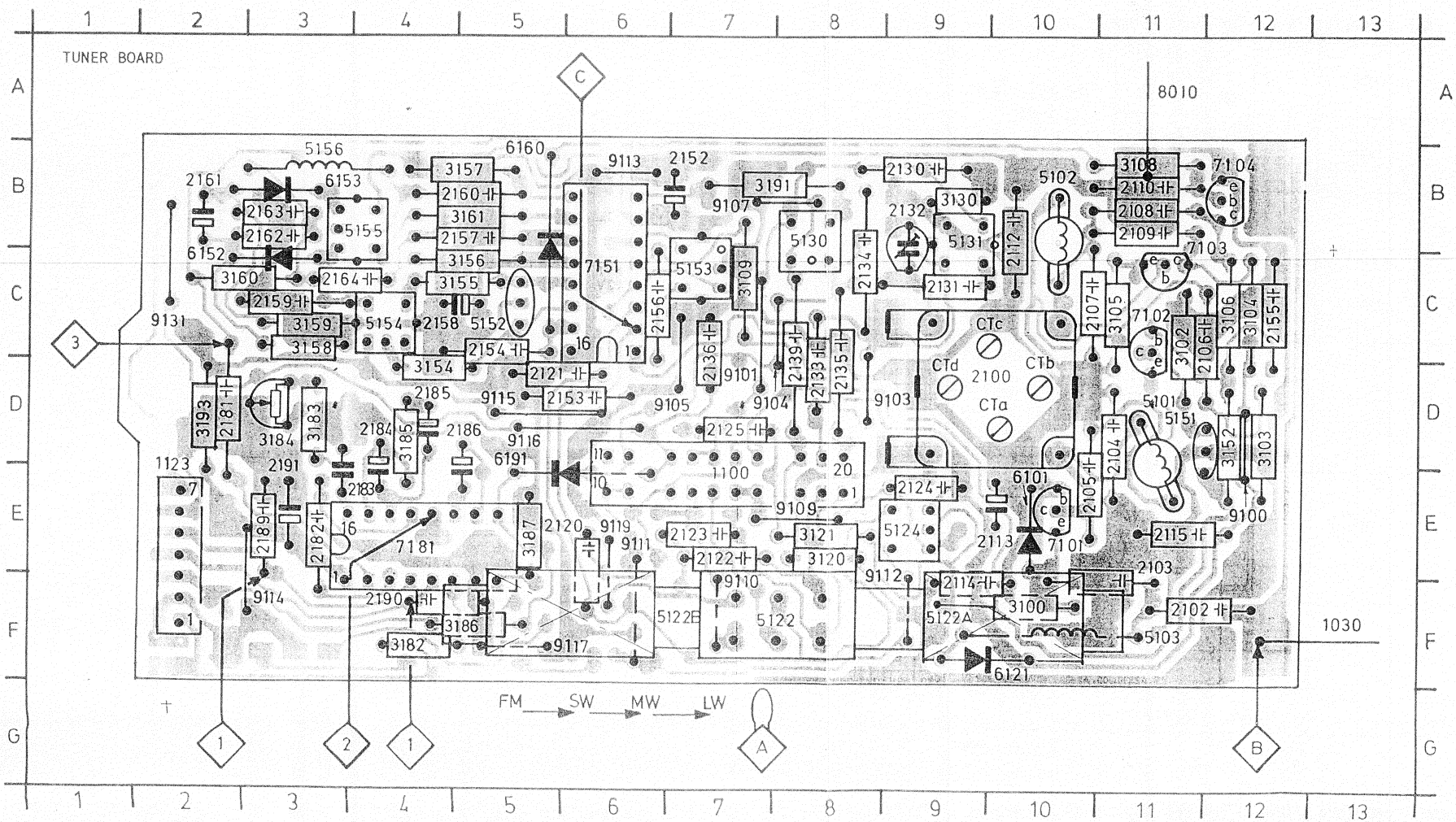
7313	7330
1 : 1.3V	1 : 1.3V
2 : 0V	2 : 0V
3 : 11.2V	3 : 11.8V
4 : 0V	4 : 0V
5 : 0V	5 : 0V
6 : 1.3V	6 : 1.3V
7 : 5.8V	7 : 6.1V
8 : 10.3V	8 : 11.0V
9 : 0V	9 : 0V
10 : 12V	10 : 12V
11 : 10.3V	11 : 11.0V
12 : 5.8V	12 : 6.1V

7335

e : 5.4V
b : 6.1V
c : 11.0V

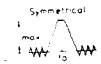
....V measured in tape on position

1030	F13	2108	B11	2123	E7	2152	B7	2162	B3	2190	F4	3120	E8	3160	C2	5101	D11	5154	C4	7102	C11	9105	D7	9117	F6
1100	E7	2109	B11	2124	E9	2153	D5	2163	B3	2191	E3	3121	E8	3161	B5	5102	B10	5155	B4	7103	B11	9107	B7	9119	E6
1123	E2	2110	B11	2125	D7	2154	C5	2164	C3	3100	F10	3125	D12	3182	F4	5103	F11	5156	B3	7104	B12	9109	E8	9131	C2
2100	D9	2112	B10	2130	B9	2155	C12	2181	D2	3102	C11	3130	B9	3183	D3	5122	F7	6101	E10	7151	C6	9110	F7		
2102	F11	2113	E10	2131	C9	2156	C62	2182	E3	3103	D12	3154	D4	3184	D3	5124	E9	6121	F10	7181	E4	9111	E6		
2103	E11	2114	F9	2132	B9	2157	B5	2183	D3	3104	C12	3155	C4	3185	D4	5130	B8	6152	C2	8010	A11	9112	E8		
2104	D11	2115	E11	2134	C8	2158	C4	2184	D4	3105	C11	3156	C5	3186	F5	5131	B9	6153	B3	9100	E12	9113	B6		
2105	E10	2120	E5	2135	D8	2159	C3	2185	D4	3106	C12	3157	B5	3187	E5	5151	D11	6160	B5	9101	D7	9114	F3		
2106	C11	2121	D5	2136	C7	2160	B5	2186	D5	3108	B11	3158	C3	3191	B7	5152	C5	6191	D5	9103	D9	9115	D5		
2107	C10	2122	E7	2139	D8	2161	B2	2189	E3	3109	C7	3159	C3	3193	D2	5153	C7	7101	E10	9104	D7	9116	D5		



SK...	FREQUENCY	I/P	VARICON	ADJUST	O/P	SCOPE/METER

AM - IF

MW	468kHz △f=10kHz via 10nF	C	max.	5153 5154	3	

AM - RF

LW * 148.5-283.5kHz	147kHz 160kHz	A	max. Tune	5130 5122B	1	max.
MW * 526.5-1606.5kHz	1635kHz 560kHz 1500kHz		min. Tune Tune	CTc 5122A CTd		
SW * $ 5.95-17.9MHz	5.8MHz 18.1MHz 6.2MHz	B	max. min. Tune	5131 2132 5124		

FM - IF

FM	10.7MHz △f=300kHz (50Hz) via 10nF	B	max.	5155	3	

FM - RF

FM # 87.5-108MHz	87.35MHz @ Mod 1kHz △f=22.5kHz	B	max.	5102 5101	1	max.
	108.2MHz @ Mod 1kHz △f=22.5kHz		min.	CTb CTa		

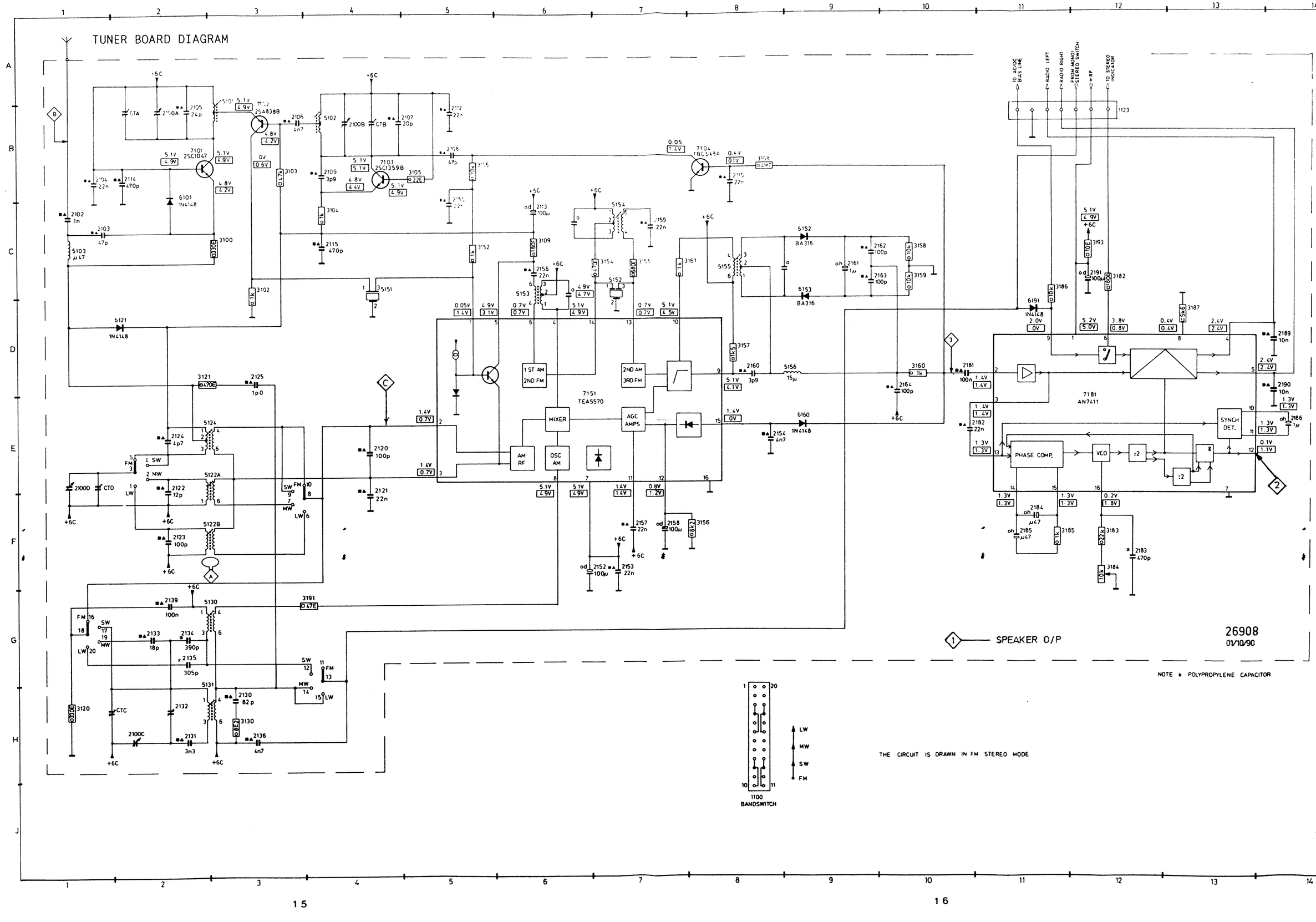
* Mod 1kHz 30% # via 10nF + 15Ω @ ± 0.15MHz $ via 10pF

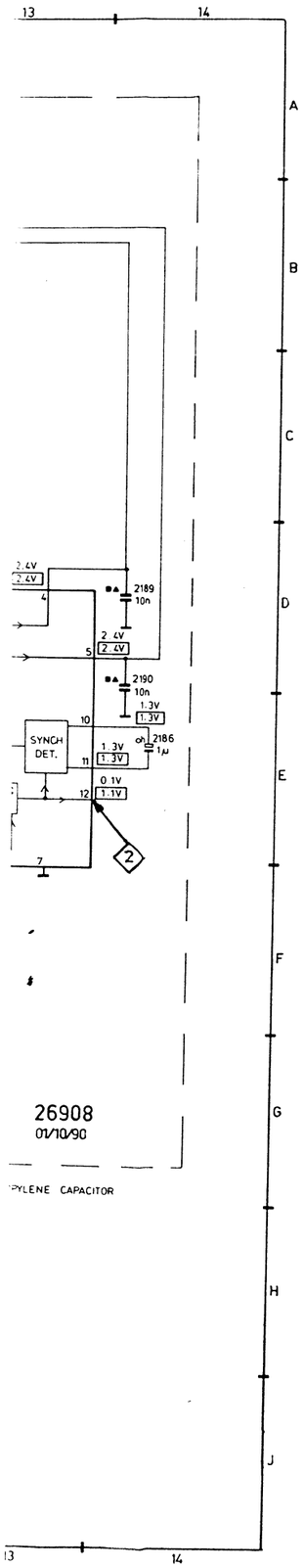
STEREO DECODER

SK...	ADJUST	O/P	COUNTER
FM STEREO	3184	2	19kHz

Repeat

TUNER BOARD DIAGRAM





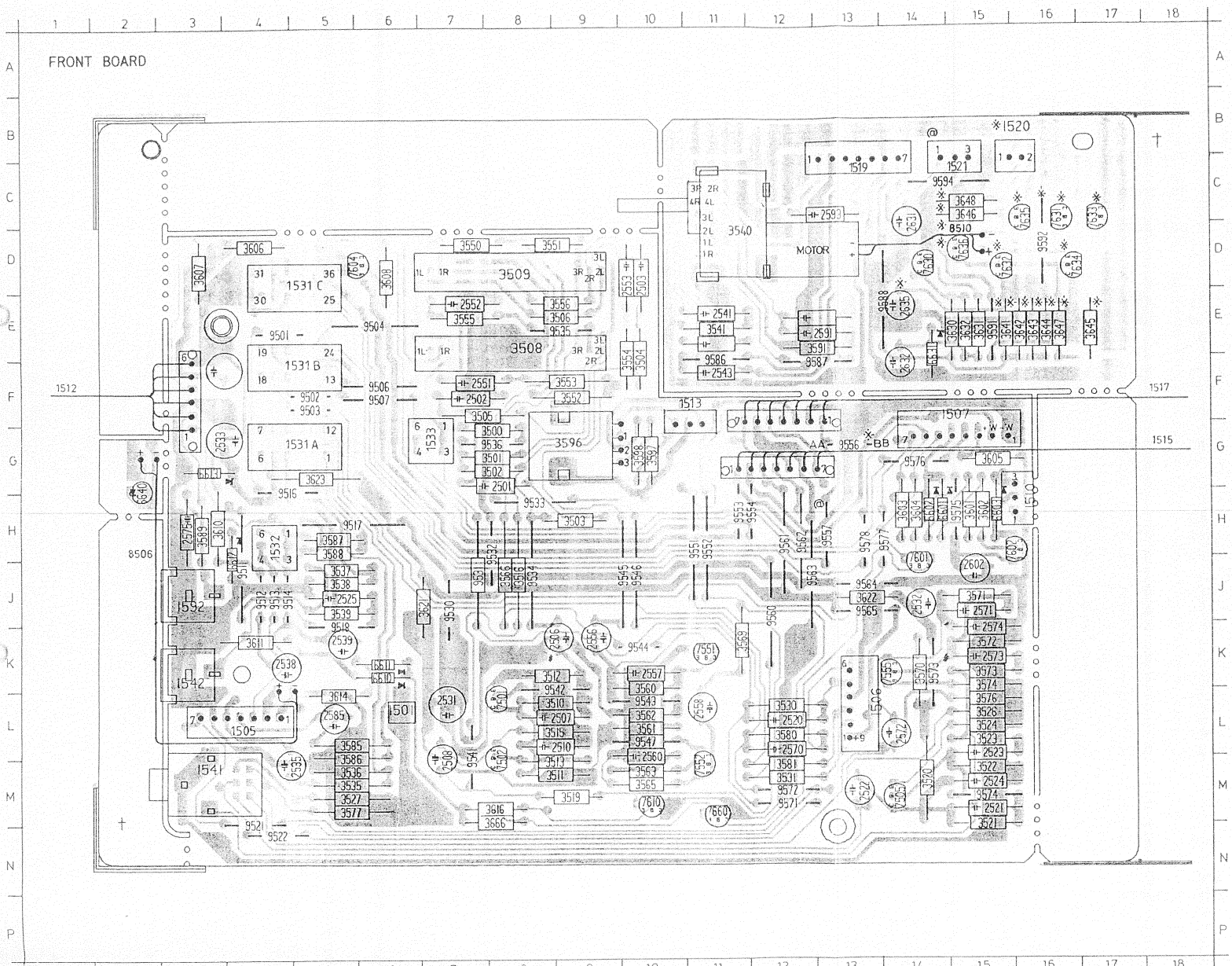
1100	J8	3182	C12
1123	A12	3183	F12
2100A	B2	3184	F12
2100B	B4	3185	F11
2100C	H2	3186	C11
2100D	E1	3191	G3
2102	C1	3193	C12
2103	C1	5101	A3
2104	B1	5102	B4
2105	B2	5103	C1
2106	B3	5122A	E2
2107	B5	5122B	F2
2108	B5	5124	E2
2109	B4	5131	G2
2110	B8	5151	C4
2112	C5	5152	C7
2113	C6	5153	C6
2114	B2	5154	C7
2115	C2	5155	C8
2120	E4	5156	D9
2121	E4	6101	B2
2122	E2	6121	D2
2123	F2	6152	C9
2124	E2	6153	C9
2125	D3	6160	E9
2130	H3	6191	D11
2131	H2	7101	B2
2132	H2	7102	A3
2133	G2	7103	B4
2134	G2	7104	B8
2135	G2	7151	D6
2136	H3	7181	E12
2139	G2		
2152	F7		
2153	F7		
2154	E8		
2155	B5		
2156	C6		
2157	F7		
2158	F7		
2159	C7		
2160	D8		
2161	C9		
2162	C9		
2163	C9		
2164	D10		
2181	D10		
2182	E10		
2183	F12		
2184	F11		
2185	F11		
2186	E14		
2189	D14		
2190	D14		
2191	C12		
3100	C3		
3102	C3		
3103	B3		
3104	C4		
3105	B5		
3106	B5		
3108	B8		
3109	C6		
3120	H1		
3121	D2		
3130	H3		
3152	C5		
3154	C7		
3155	C7		
3156	F8		
3157	D8		
3158	C10		
3159	C10		
3160	D10		
3161	C7		

		AM	FM
7101	e :	4.8V	4.2V
	b :	5.1V	4.9V
	c :	5.1V	4.9V
7102	e :	5.1V	4.9V
	b :	4.8V	4.2V
	c :	0V	0.6V
7103	e :	4.8V	4.4V
	b :	5.1V	4.9V
	c :	5.1V	5.1V
7104	e :	0V	0V
	b :	0.4V	0.1V
	c :	0.1V	1.4V

7151			7181		
	AM	FM		AM	FM
1 :	0.1V	1.4V	1 :	5.2V	5.0V
2 :	1.4V	0.7V	2 :	1.4V	1.4V
3 :	1.4V	0.7V	3 :	1.4V	1.4V
4 :	5.1V	4.9V	4 :	2.4V	2.4V
5 :	4.9V	3.1V	5 :	2.4V	2.4V
6 :	0.7V	0.7V	6 :	3.8V	0.8V
7 :	5.1V	4.9V	7 :	0V	0V
8 :	5.1V	4.9V	8 :	0.4V	0.4V
9 :	5.1V	4.1V	9 :	2V	0V
10 :	5.1V	4.5V	10 :	1.3V	1.3V
11 :	1.4V	1.4V	11 :	1.3V	1.3V
12 :	0.8V	1.2V	12 :	0.1V	1.1V
13 :	0.7V	0.7V	13 :	1.3V	1.3V
14 :	4.9V	4.7V	14 :	1.3V	1.3V
15 :	1.4V	0V	15 :	1.3V	1.3V
16 :	0V	0V	16 :	0.2V	1.8V

....V measured in radio on position

FRONT BOARD



1505	L4	3523	L15	6613	G3
1506	L13	3524	L15	6631	E14
1507	F15	3526	L15	7501	L8
1510	H16	3527	M5	7502	M8
1510	L6	3530	L12	7505	M14
1512	F1	3531	M12	7551	K11
1513	F11	3535	M5	7552	M11
1531 A	G5	3536	M5	7555	K14
1515	G18	3537	J5	7601	H14
1517	F18	3538	J5	7602	H15
1519	B13	3539	J5	7604	D5
1520	B16	3540	D11	7610	M10
1521	C15	3541	E11	7630	D14
1531B	D5	3550	D7	7631	C16
1531C	D5	3551	D8	7632	D15
1532	H4	3552	F9	7633	C17
1533	G7	3553	F9	7634	D16
1541	M3	3554	E10	7635	C16
1542	K3	3555	E7	7636	D15
1592	J3	3556	E9	7660	M11
2502	F7	3560	K10	8500	H2
2503	D10	3561	L10	8510	D15
2506	K8	3562	L10	9501	E4
2507	L8	3563	M10	9502	D5
2508	L7	3565	M10	9503	D5
2510	L6	3566	J8	9504	E6
2520	L12	3569	K11	9507	F6
2521	M15	3570	K14	9511	J4
2522	M13	3571	J15	9512	J4
2523	L15	3572	K15	9513	J4
2524	M15	3573	K15	9514	J4
2525	J5	3574	K15	9516	G4
2531	L7	3576	L15	9517	H5
2532	J14	3577	M5	9518	J5
2533	G3	3580	L12	9521	M4
2535	M5	3581	M12	9522	N4
2538	K4	3585	L5	9530	J7
2539	K5	3586	L5	9531	J7
2541	E11	3587	H5	9532	H8
2543	F11	3588	H5	9533	H8
2551	F7	3589	H3	9534	J8
2552	E7	3591	E13	9535	E9
2553	D10	3596	G9	9536	G8
2556	K9	3597	G10	9541	L7
2557	K10	3598	G10	9542	K8
2558	L11	3601	H15	9543	L10
2560	L10	3602	H15	9545	G10
2570	L12	3603	H14	9546	G10
2571	J15	3604	H14	9547	L10
2572	L14	3605	G15	9551	H11
2573	K15	3606	D4	9552	H11
2574	K15	3607	D3	9553	H11
2575	H3	3608	D6	9554	H12
2585	L5	3610	H3	9556	G13
2591	E13	3611	K4	9557	H13
2593	B13	3614	L5	9560	J12
2602	J15	3616	M8	9561	H12
2631	E14	3621	J7	9562	H12
2632	F14	3622	J13	9563	J12
2635	E14	3623	G5	9564	J13
3500	G8	3630	E15	9565	J13
3501	G8	3631	E15	9571	M12
3501	G8	3632	E15	9572	M12
3502	G8	3641	E15	9573	K14
3503	H9	3642	E16	9574	M15
3504	E10	3643	E16	9575	H15
3505	F7	3644	E16	9576	G14
3506	E9	3645	E17	9578	H13
3508	E8	3646	C15	9586	E11
3509	D8	3647	E16	9587	E13
3510	L8	3648	C15	9588	E14
3511	M8	3666	M8	9591	E15
3512	K8	6506	F6	9592	D16
3513	M8	6544	K10	9594	C14
3515	L8	6601	H14	J545	G10
3516	J8	6602	H14		
3519	M9	6603	H15		
3520	M14	6610	K6		
3521	M15	6611	K6		
3522	M15	6612	H4		

NOTE.
ITEMS MARKED ※ FOR AZ8400 FAMILY ONLY
ITEMS MARKED @ FOR AZ8300 FAMILY ONLY

7602	e :	2.9Vrw	2.4fw
	b :	2.2Vrw	1.7Vfw
	c :	2.7Vrw	2.0Vfw

		Normal speed	High speed
7601	e :	9.6V	9.6V
	b :	8.9V	8.9V
	c :	0.2V	9.5V

		Volume up	Volume down
7631	e :	0.7V	5.3V
	b :	0.1V	5.9V
	c :	7.4V	7.4V
7632	e :	5.3V	0.7V
	b :	5.9V	0.1V
	c :	7.4V	7.4V
7633	e :	0.7V	5.3V
	b :	0.1V	5.9V
	c :	0V	0V
7634	e :	5.3V	0.7V
	b :	5.9V	0.1V
	c :	0V	0V
7635	e :	0V	0V
	b :	0.7V	0.6V
	c :	0.1V	5.9V
7636	e :	0V	0V
	b :	0.6V	0.7V
	c :	5.9V	0.1V

+RF : 5.5V

+6 : 6.2V

+9 : 8.4V

+10 : 9.6V

7501

e : 0V
b : 0.6V
c : 1.8V

7502

e : 1.1V
b : 1.8V
c : 6.9V

7505

e : 0.1V
b : 0.7V
c : 5.5V

7551

e : 0V
b : 0.6V
c : 1.8V

7552

e : 1.1V
b : 1.8V
c : 6.9V

7555

e : 0.1V
b : 0.7V
c : 5.5V

7630

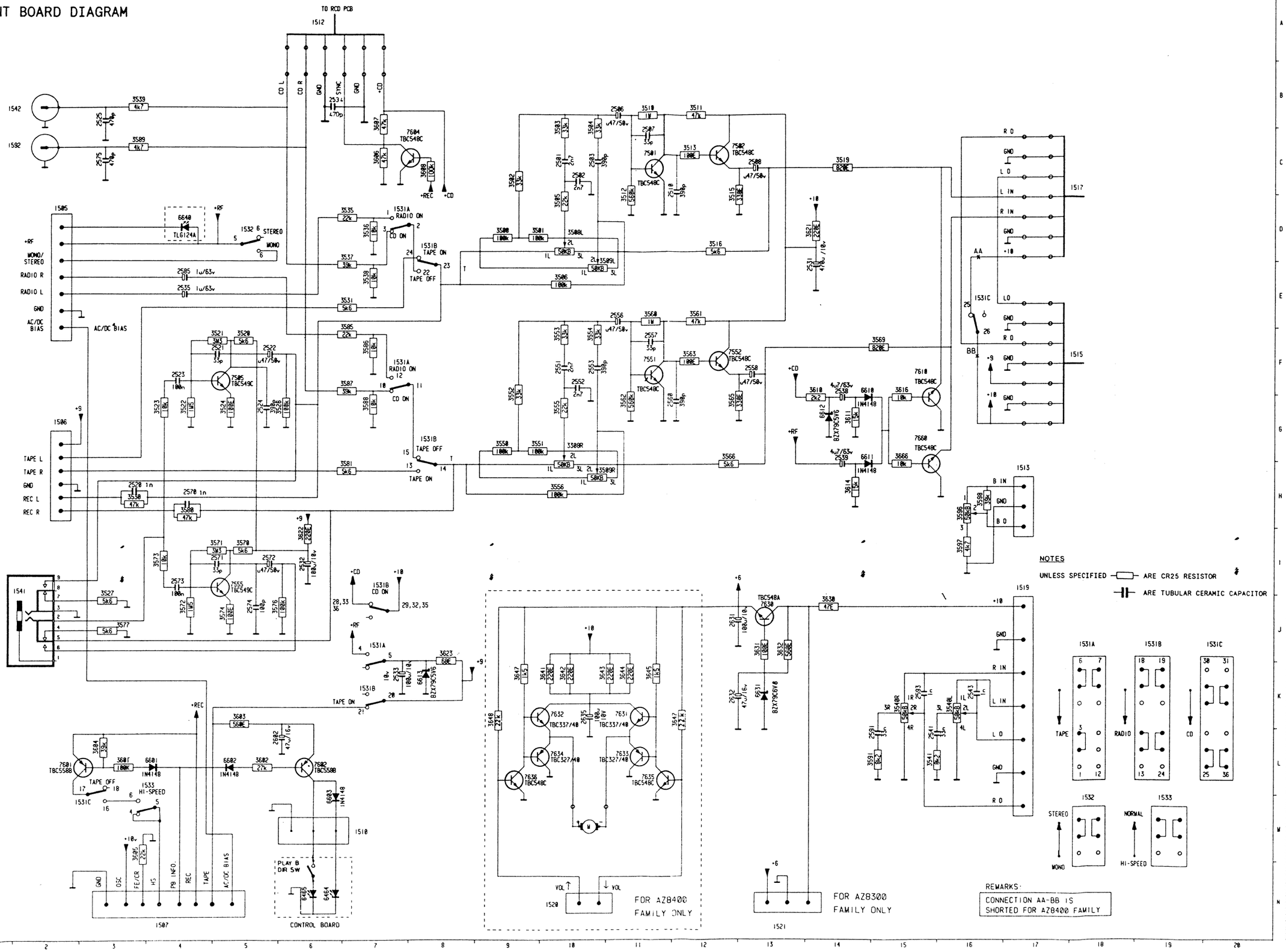
e : 6.2V
b : 6.8V
c : 9.5V

....V measured in tape on position

....Vrw measured in tape rewind direction

....Vfw measured in tape forward direction

FRONT BOARD DIAGRAM

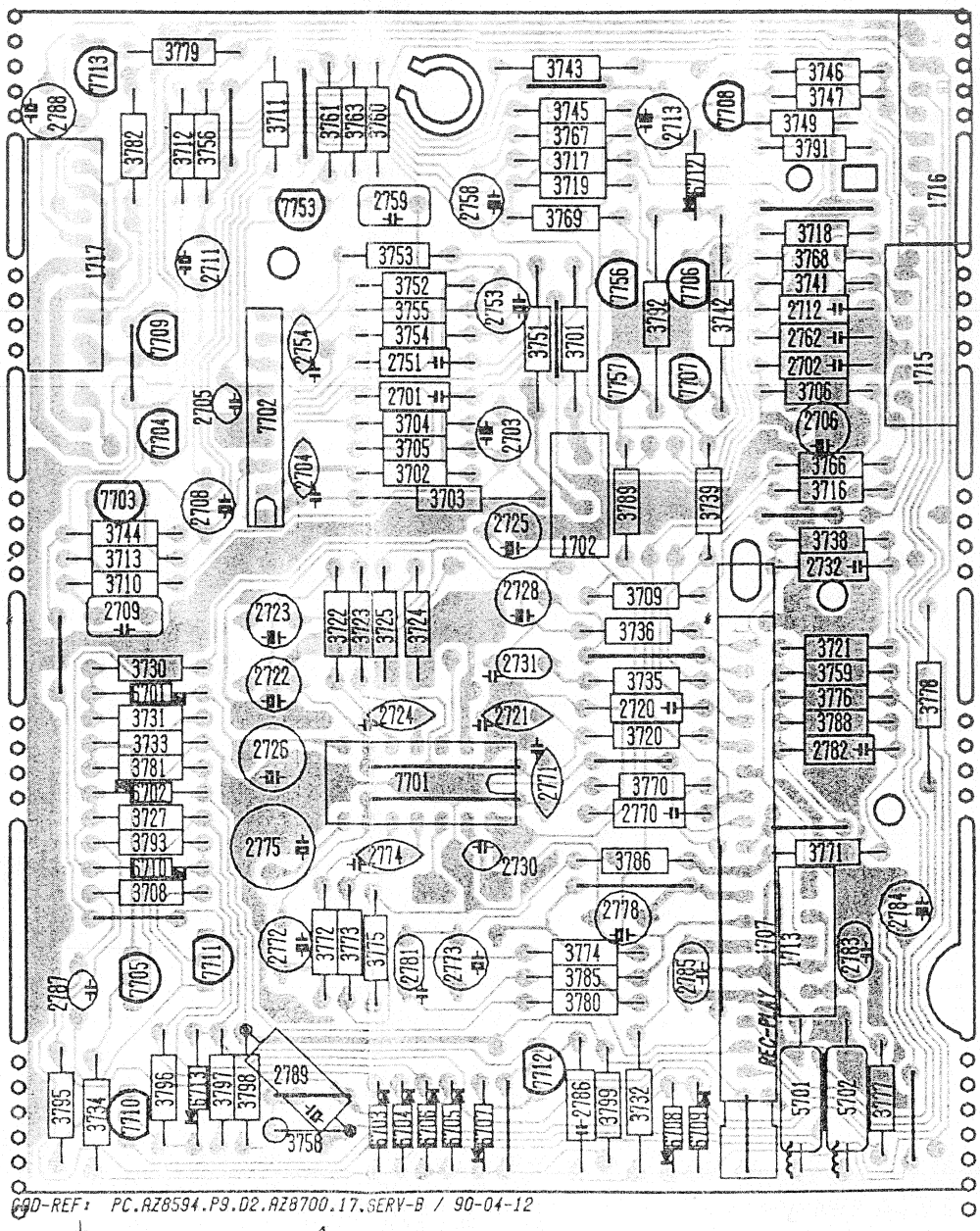


1505	D 2	3621	D14
1506	G 2	3622	I 6
1507	W 4	3623	J 8
1510	M 7	3630	J14
1512	B 6	3631	J15
1513	H17	3632	J13
1515	F17	3641	K10
1517	D17	3642	K10
1519	I17	3643	K10
1520	W10	3644	K11
1521	W13	3645	K11
1531A	J 7	3647	K 9
1531A	F 7	3647	K12
1531A	D 7	3648	K 9
1531B	K 7	3666	G15
1531B	I 7	6464	N 6
1531B	G 8	6465	N 6
1531B	D 8	6681	L 4
1531C	M 5	6682	L 5
1531C	E16	6683	M 6
1532	D 5	6610	F14
1533	L 4	6611	G14
1541	I 2	6612	G14
1542	B 2	6613	W 8
1592	C 2	6631	K13
2501	C10	6640	D 4
2502	C10	7501	C11
2503	C10	7502	C12
2506	B11	7505	F 5
2507	C11	7551	F11
2508	C13	7552	F12
2510	C11	7555	I 5
2520	H 3	7556	L 2
2521	F 5	7601	L 6
2522	F 5	7602	L 6
2523	F 4	7604	C 8
2524	G 5	7618	F15
2525	B 3	7630	J13
2531	E14	7631	K11
2532	I 6	7632	K10
2533	K 7	7633	L11
2535	E 4	7634	L10
2538	F14	7635	L11
2539	G14	7636	L 9
2541	L15	7660	G15
2543	K16	2534	A 6

3300R	G10		
3500	D 9		
3501	D 9		
3502	C 9		
3503	B10		
3504	B10		
3505	D10		
3506	E10		
3508L	D10		
3508R	H11		
3510	B11		
3511	B12		
3512	C11		
3513	C12		
3515	C12		
3516	D12		
3519	C14		
3520	F 5		
3521	F 5		
3522	G 4		
3523	G 4		
3524	G 5		
3525	F 5		
3526	G 6		
3527	I 3		
3530	H 3		
3531	E 7		
3535	D 7		
3536	D 7		
3537	E 7		
3538	E 7		
3539	B 3		
3548L	K15		
3548R	K15		
3541	L15		
3550	G 9		
3551	G 9		
3552	F 9		
3553	F10		
3554	F10		
3555	G10		
3556	H10		
3560	F11		
3561	E12		
3562	G11		
3563	F12		
3565	G12		
3566	G12		
3569	F15		
3570	I 5		
3571	I 5		
3572	J 4		
3573	I 4		
3574	J 5		
3576	J 5		
3577	J 3		
3580	H 4		
3581	H 7		
3585	E 7		
3586	F 7		
3587	F 7		
3588	G 7		
3589	C 3		
3591	L15		
3596	H16		
3597	I16		
3598	H16		
3681	L 3		
3682	K 5		
3683	K 5		
3684	L 3		
3685	M 3		
3696	C 7		
3697	B 7		
3698	C 8		
3610	F14		
3611	G14		
3614	H14		
3616	F15		

1702	D 4	2721	E 4	2772	F 2	3705	C 3	3727	E 2	3751	C 4	3773	F 3	3796	F 2	7701	E 3		
1707	F 5	2722	D 2	2773	F 3	3706	C 5	3730	D 2	3752	B 3	3774	F 4	3797	F 2	7702	C 2		
1713	F 5	2723	D 2	2774	E 3	3708	E 2	3731	E 2	3753	B 3	3775	F 3	3798	F 2	7703	C 2		
1715	C 6	2724	E 3	2775	E 2	3709	D 4	3732	G 4	3754	C 3	3776	D 5	3799	G 4	7704	C 2		
1716	B 6	2725	D 4	2778	F 4	3710	D 2	3733	E 2	3755	C 3	3777	F 5	5701	F 5	7705	F 2		
1717	B 2	2726	E 2	2781	F 3	3711	B 2	3734	G 1	3756	B 2	3778	D 6	5702	F 5	7706	B 4		
2701	C 3	2728	D 4	2782	E 5	3712	B 2	3735	D 4	3758	G 3	3779	A 2	6701	D 2	7707	C 4		
2702	C 5	2730	E 4	2783	F 5	3713	D 2	3736	D 4	3759	D 5	3780	F 4	6702	E 2	7708	B 5		
2703	C 4	2731	D 4	2784	F 6	3716	C 5	3738	D 5	3760	B 3	3781	E 2	6703	G 3	7709	C 2		
2704	C 3	2732	D 5	2785	F 4	3717	B 4	3739	D 5	3761	B 3	3782	B 2	6704	G 3	7710	G 2		
2705	C 2	2751	C 3	2786	F 4	3718	B 5	3741	B 5	3763	B 3	3785	F 4	6705	G 3	7711	F 2		
2706	C 5	2753	C 4	2787	F 1	3719	B 4	3742	C 5	3766	C 5	3786	E 4	6706	G 3	7712	F 4		
2708	D 2	2754	C 3	2788	B 1	3720	E 4	3743	A 4	3767	B 4	3788	E 5	6707	G 3	7713	A 2		
2709	D 2	2758	B 3	2789	F 2	3721	D 5	3744	D 2	3768	B 5	3789	D 4	6708	G 4	7753	B 3		
2711	B 2	2759	B 3	3701	C 4	3722	D 3	3745	B 4	3769	B 4	3791	B 5	6709	G 5	7756	B 4		
2712	C 5	2762	C 5	3702	C 3	3723	D 3	3746	A 5	3770	E 4	3792	C 4	6710	E 2	7757	C 4		
2713	B 4	2770	E 4	3703	C 3	3724	D 3	3747	A 5	3771	E 5	3793	E 2	6712	B 5				
2720	E 4	2771	E 4	3704	C 3	3725	D 3	3749	B 5	3772	F 3	3795	G 1	6713	F 2				

TAPE UNIT BOARD / COMPONENTSIDE VIEW / AZ8700



GOD-REF: PC.AZ8594.P9.D2.AZ8700.17.SERV-B / 90-04-12

ADJUSTMENT	CASSETTE	SK...	RECORDER POSITION DECK A	DECK B	MEASURE ON	READ ON	ADJUST WITH	ADJUST TO
Azimuth	10KHz SBC 420*	Tape	Play	-	1303	mV-meter	Left hand Screw Play head	Max. L = R
		Tape	-	Play fwd	1303	mV-meter	Left hand Screw R/P Head	
		Tape	-	Play rev	1303	mV-meter	Right hand Screw R/P Head	
Motor speed (Normal)	3150Hz SBC 420*	Tape	Play	-	1303	Wow and Flutter meter	preset in motor	** a
		Tape	-	Play	1303	Wow and Flutter meter	-	
Motor speed (high)	3150Hz SBC 420*	Tape HSD	Record	Play	1303	Frequency counter	-	6.0KHz ±0.3KHz

* SBC 420 : 4822 397 30071

** a The maximum permissible speed deviation is 2%.
Moreover, the wow and flutter value can be read.
This value should not exceed 0.35%.

7701	
1	: 0V
2	: 4.5V
3	: 8.1V
4	: 4.4V
5	: 4.4V
6	: 0V
7	: 0.25V
8	: 4.5V
9	: 0V
10	: 4.4V
11	: 4.4V
12	: 8.1V
13	: 4.5V
14	: 8.8V

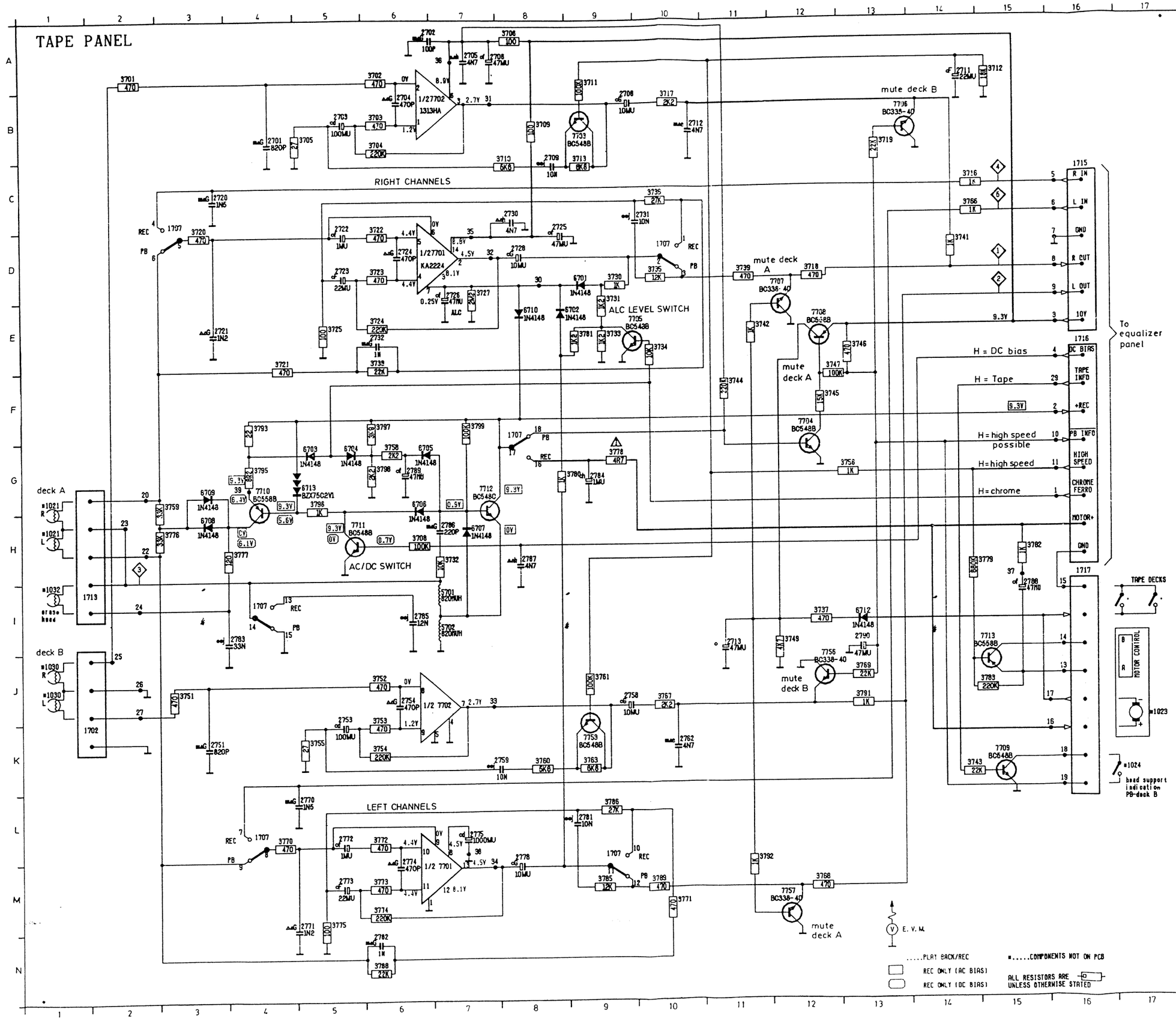
7702	
1	: 1.2V
2	: 0V
3	: 2.7V
4	: 0V
5	: 0V
6	: 8.9V
7	: 2.7V
8	: 0V
9	: 1.2V

		AC-BIAS	DC-BIAS
7710	e	9.3V	6.4V
	b	9.3V	5.6V
	c	0V	6.1V
7711	e	0V	0V
	b	0V	0.7V
	c	9.3V	0V
7712	e	0V	
	b	0.9V	
	c	9.3V	

....V measured in the tape on position

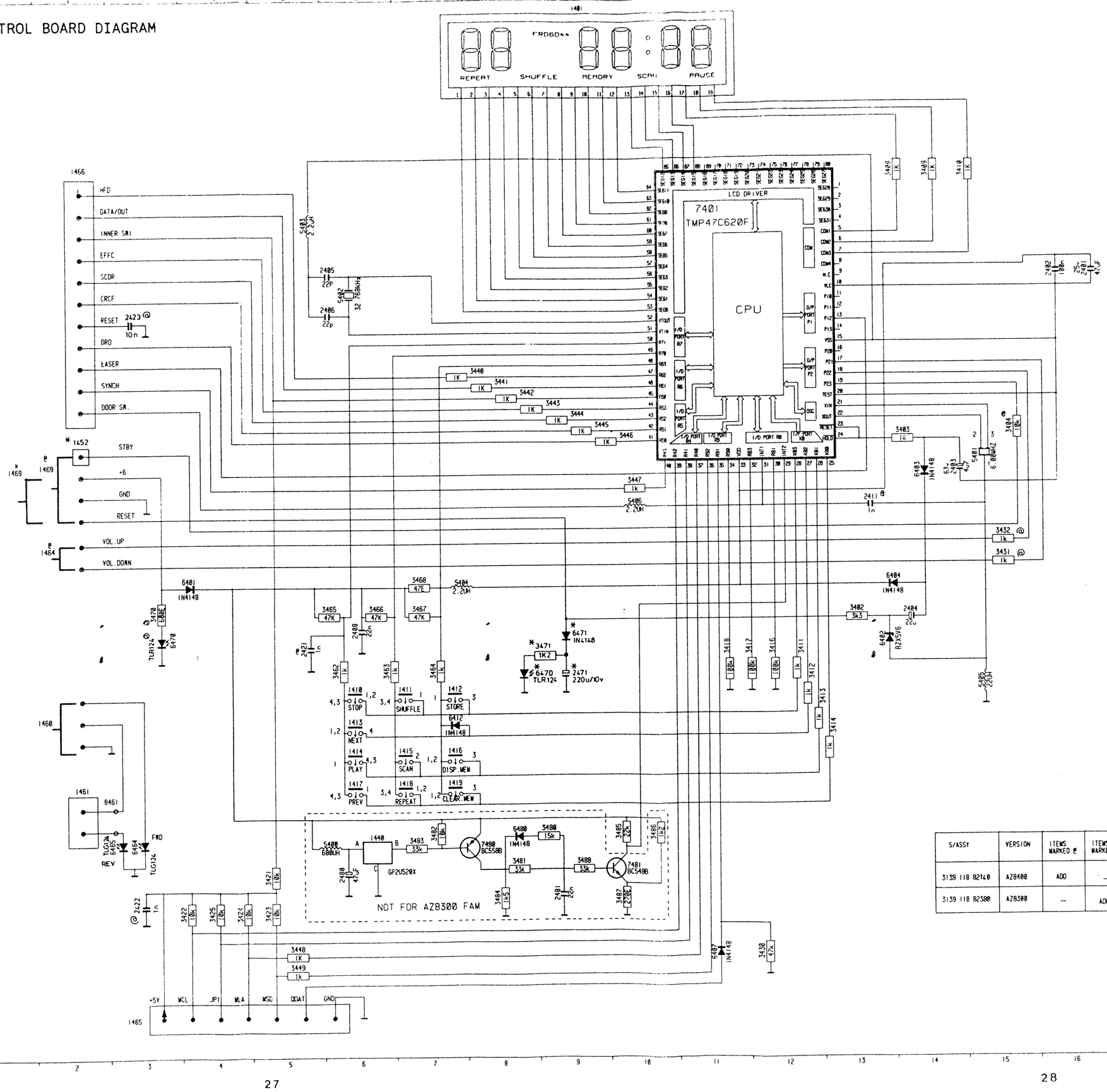
<u>____V</u> measured in the tape recording position

TAPE PANEL



	■1021	H 1	3760	K 8
	■1021	D 1	3761	J 9
	■1023	J17	3763	K 9
	■1024	K16	3766	C14
A	■1030	J 1	3767	J10
	■1030	J 1	3768	M12
	■1032	I 1	3769	J13
	.	I17	3770	L 4
	.	I17	3771	M10
	1702	K 2	3772	L 6
	1707	C 9	3773	M 8
	1707	D10	3774	M 6
B	1707	I 4	3775	M 5
	1707	F 8	3776	H 2
	1707	L 4	3777	H 3
	1707	L 9	3778	G 9
	1713	I 2	3779	H14
	1715	C16	3780	G 8
	1716	E16	3781	E 9
	1717	H16	3782	H15
C	2701	B 4	3783	J15
	2702	A 7	3785	M 9
	2703	B 5	3786	L 9
	2704	B 6	3788	M 6
	2705	A 7	3789	M1C
	2706	A 7	3791	J13
	2708	B 9	3792	L11
	2709	B 8	3793	F 4
D	2711	A14	3795	G 4
	2712	B10	3796	G 5
	2713	I11	3797	F 6
	2720	C 3	3798	G 6
	2721	E 3	3799	F 7
	2722	C 5	5701	I 7
	2723	D 5	5702	I 7
	2724	D 6	6701	D 9
E	2725	C 8	6702	E 8
	2726	D 7	6703	G 5
	2728	D 8	6704	G 5
	2730	C 8	6705	G 6
	2731	C 9	6706	G 6
	2732	E 6	6707	H 7
	2751	K 3	6708	H 3
	2753	J 5	6709	G 3
F	2754	J 6	6710	E 8
	2758	J 9	6712	I13
	2759	K 8	6713	G 4
	2762	K10	7701	D 6
	2770	L 4	7702	B 6
	2771	M 4	7703	B 9
	2772	L 5	7704	F12
	2773	M 5	7705	E10
G	2774	L 6	7706	B13
	2775	L 7	7707	D12
	2778	L 8	7708	E12
	2781	L 9	7709	K15
	2782	N 6	7710	G 4
	2783	I 3	7711	H 5
	2784	G 9	7712	G 7
	2785	I 6	7713	I15
	2786	H 7	7753	K 9
H	2787	H 8	7756	J12
	2788	I15	7757	M12
	2789	G 6		
	2790	I13		
	3701	A 2		
	3702	A 6		
	3703	B 6		
	3704	B 6		
I	3705	B 4		
	3706	A 8		
	3708	H 6		
	3709	B 8		
	3710	B 8		
	3711	A 9		
	3712	A15		
	3713	B 9		
J	3716	C14		
	3717	B10		
	3718	D12		
	3719	B13		
	3720	C 3		
	3721	E 4		
	3722	C 6		
	3723	D 6		
K	3724	E 6		
	3725	E 5		
	3727	D 7		
	3730	D 9		
	3731	D 9		
	3732	H 7		
	3733	E 9		
	3734	E10		
L	3735	D10		
	3736	C10		
	3737	I12		
	3738	E 6		
	3739	D11		
	3741	D14		
	3742	E11		
	3743	K14		
M	3744	F11		
	3745	F12		
	3746	E13		
	3747	E12		
	3749	I12		
	3751	J 3		
	3752	J 6		
	3753	J 6		
	3754	K 6		
N	3755	K 5		
	3756	G13		
	3758	G 6		
	3759	G 2		

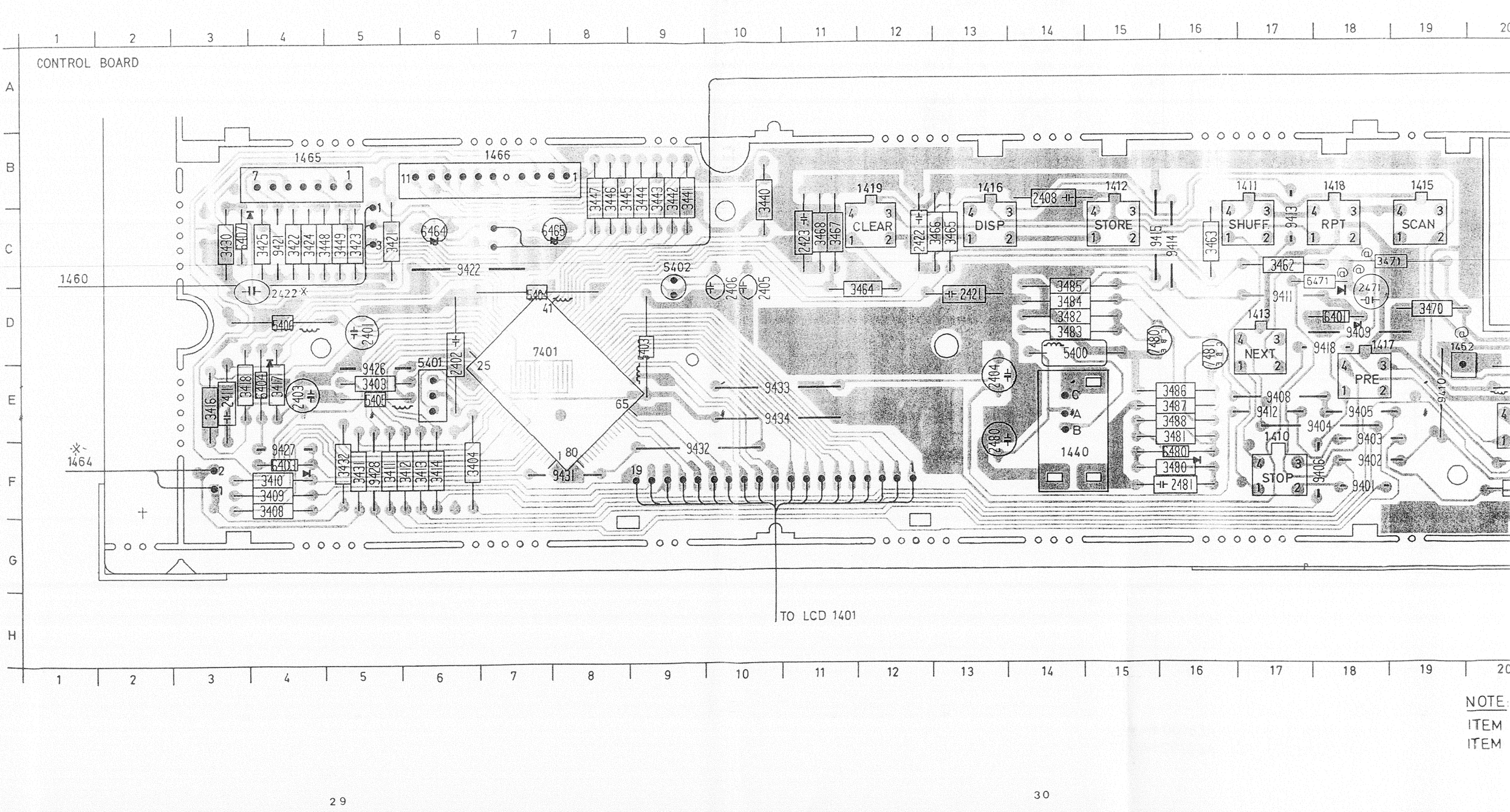
CONTROL BOARD DIAGRAM



S/ASSY	VERSION	ITEMS MARKED @	ITEMS MARKED x
3139 118 82140	AZ8400	ADD	—
3139 118 82380	AZ8300	—	ADD

1401	A 9	6402	I 13
1410	J 6	6403	G 14
1411	J 7	6404	H 13
1412	J 7	6407	M 11
1413	J 6	6412	J 7
1414	K 6	6464	L 3
1415	K 7	6465	L 2
1416	K 7	6470	I 3
1417	K 6	6480	L 8
1418	K 7	7401	C 11
1419	K 7	7400	L 8
1440	L 6	7481	L 10
1460	J 2	8461	K 2
1464	H 2		
1465	N 3		
1466	C 2		
1469	G 2		
2401	D 16		
2402	D 16		
2403	G 14		
2404	I 14		
2405	D 6		
2406	D 6		
2408	I 6		
2411	G 15		
2421	I 5		
2480	L 6		
2481	M 9		
3402	I 13		
3403	F 14		
3404	F 15		
3408	C 13		
3409	C 14		
3410	C 14		
3411	I 12		
3412	I 12		
3413	J 13		
3414	J 13		
3416	I 12		
3417	I 12		
3418	I 11		
3421	L 5		
3422	M 4		
3423	M 5		
3424	M 4		
3425	M 4		
3430	M 12		
3431	M 15		
3432	H 15		
3440	E 8		
3441	E 8		
3442	F 8		
3443	F 9		
3444	F 9		
3445	F 9		
3446	F 10		
3447	G 10		
3448	M 5		
3449	N 5		
3462	I 6		
3463	I 6		
3464	I 7		
3465	I 6		
3466	I 6		
3467	I 7		
3468	H 7		
3470	I 3		
3480	L 9		
3481	L 8		
3482	L 7		
3483	L 7		
3484	M 8		
3485	L 10		
3486	L 10		
3487	M 10		
3488	L 9		
5400	L 6		
5401	G 15		
5402	D 6		
5403	C 5		
5404	H 7		
5405	J 15		
5406	G 10		
6401	H 4		
6471	I 9		
3471	I 9		
2471	I 9		
1452	F 2		

1401	H11	1418	B18	1469	G22	2411	E3	3403	E5	3416	E3	3431	F5	3447	B8	3468	C11	3486	E16	5406	D4	6471	D17	9404	E18	9412	E17
1410	F17	1419	B12	1469	E22	2421	D13	3404	F6	3417	E4	3432	F5	3448	C4	3470	D19	3487	E16	6401	D18	6480	F16	9405	E18	9413	C17
1411	B17	1440	F14	2401	D5	2422	C12	3408	F4	3418	E3	3440	B10	3449	C5	3471	C18	3488	E16	6402	F20	7401	D7	9406	D20	9414	C16
1412	B15	1460	C1	2402	D6	2422	D4	3409	F4	3421	C5	3441	B9	3462	C17	3480	F16	5400	D14	6403	F4	7480	D15	9406	F18	9415	C15
1413	D17	1461	B21	2403	E4	2432	C11	3410	F4	3422	C4	3442	B9	3463	C16	3481	F16	5401	D6	6404	E4	7481	D16	9407	E20	9418	D18
1414	E20	1462	E19	2404	E13	2471	D18	3411	F5	3423	C5	3443	B9	3464	D12	3482	D14	5402	C9	6407	C3	8461	C22	9408	E17	9421	C4
1415	B19	1464	F1	2405	D10	2480	F13	3412	F6	3424	C4	3444	B9	3465	C13	3483	D14	5403	D9	6464	C6	9401	F18	9409	D18	9422	C6
1416	B13	1465	B4	2406	D10	2481	F16	3413	F6	3425	C4	3445	B8	3466	C13	3484	D14	5404	D7	6465	C8	9402	F18	9410	D19	9426	E5
1417	D18	1466	B7	2408	B14	3402	F20	3414	F6	3430	C3	3446	B8	3467	C11	3485	D14	5405	E5	6470	D21	9403	F18	9411	D17	9427	F4

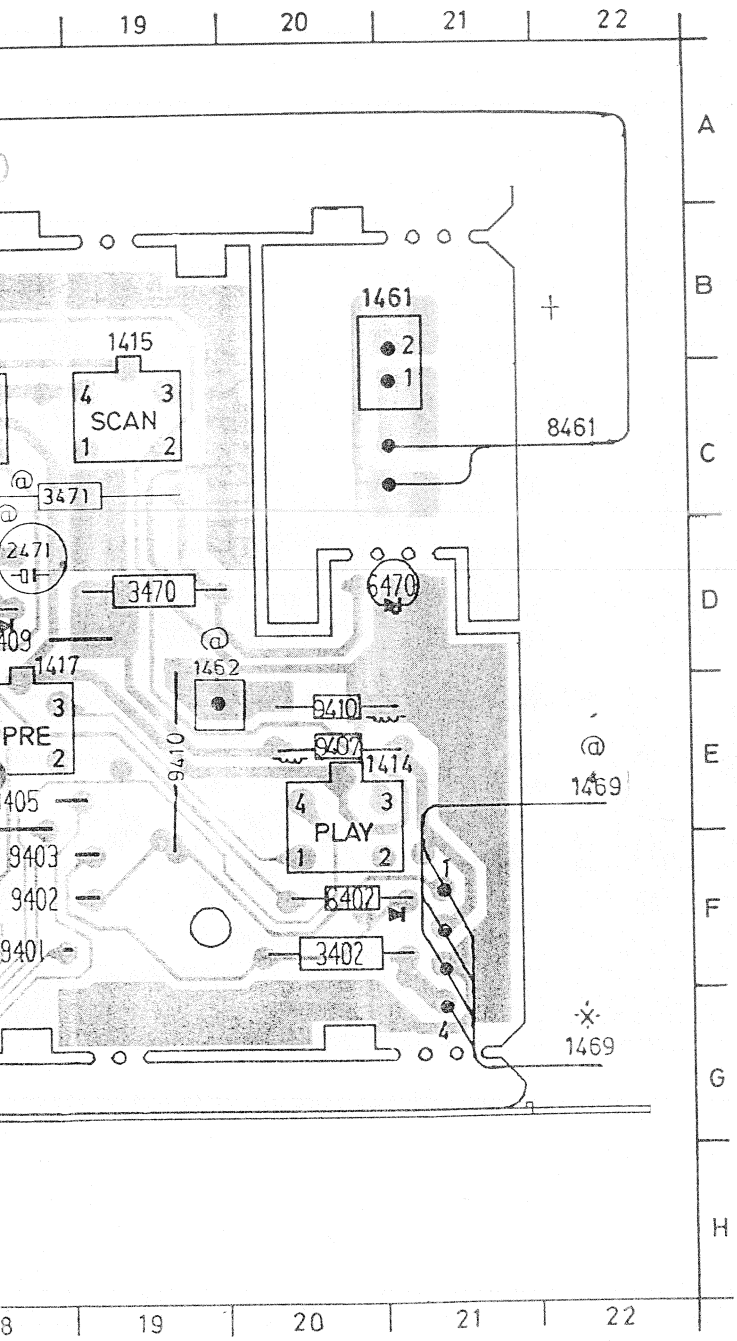


NOTE:
ITEM
ITEM

3	9412	E17	9428	F5
3	9413	C17	9431	F8
0	9414	C16	9432	F9
3	9415	C15	9433	E10
0	9418	D18	9434	E10
7	9421	C4		
3	9422	C6		
9	9426	E5		
7	9427	F4		

+5 : 5.0V

+6 : 5.4V



	7480	7481
	e : 4.7V	e : 0.8V
	b : 4.0V	b : 0V
	c : 0V	c : 1.1V
	e : 4.7V	e : 0.8V
	b : 4.7V	b : 1.6V
	c : 4.6V	c : 4.7V

....V measured in tape on position

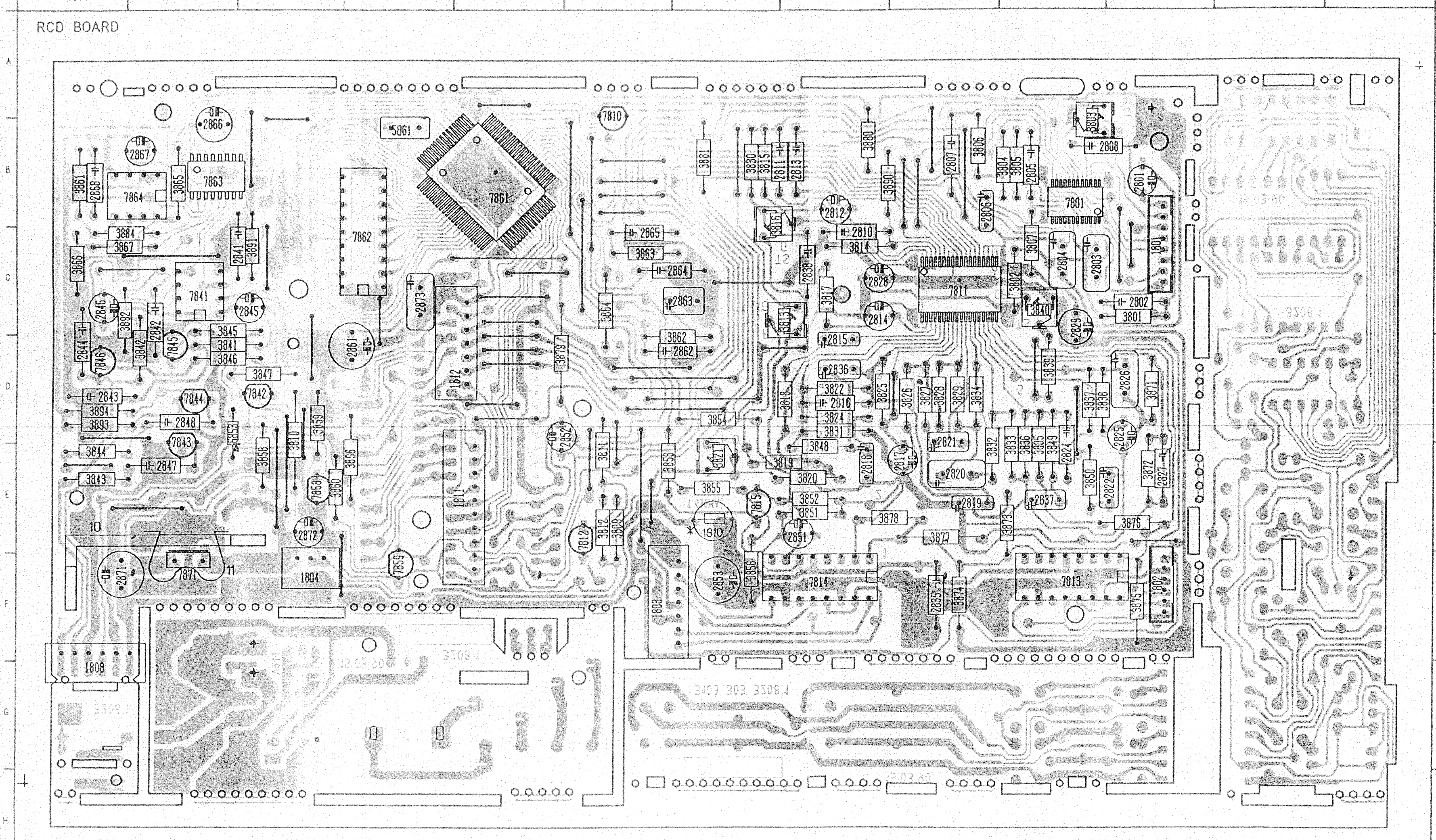
____V measured in remote on position

NOTE:

ITEM MARKED ✳ FOR AZ8400 FAMILY

ITEM MARKED @ FOR AZ8300 FAMILY

1801	C11	2803	C10	2813	B 8	2822	E11	2837	E10	2848	C 7	2866	B 2	3804	B10	3814	C 8	3824	D 8	3833	E10	3842	D 2	3851	E 8	3861	B 1	3873	E10	3884	C 1	7801	B10	7843	F 2	7864	B 2
1802	F11	2804	C10	2814	C 8	2824	E10	2838	C 8	2851	E 8	2867	B 2	3805	B10	3815	B 7	3825	D 8	3834	D 9	3843	E 1	3852	E 8	3862	D 7	3874	F 9	3890	B 9	7810	B 6	7844	D 2	7871	F 2
1803	F 6	2805	B10	2815	D 8	2825	D11	2841	C 3	2852	D 6	2868	B 1	3806	B 9	3816	B 8	3826	D 9	3835	E10	3844	E 1	3853	E 7	3863	C 6	3875	F11	3891	C 3	7811	C 9	7845	D 2	10	E 1
1804	F 3	2806	B 9	2816	D 8	2826	D11	2842	C 2	2853	F 7	2871	F 1	3807	C10	3817	C 8	3827	D 9	3836	E10	3845	D 2	3854	D 7	3864	C 6	3876	E11	3892	C 2	7812	E 6	7846	D 1	11	F 2
1808	G 1	2807	B 9	2817	E 9	2827	E11	2843	D 1	2861	D 4	2872	E 3	3809	E 6	3818	D 8	3828	D 9	3837	D10	3846	D 2	3855	E 7	3865	B 2	3877	E 9	3893	D 1	7813	F10	7858	E 3		
1811	E 5	2808	B11	2818	E 8	2828	C 8	2844	D 1	2862	D 7	2873	C 4	3810	D 3	3819	E 8	3829	D 9	3838	D11	3847	D 3	3856	F 7	3866	C 1	3878	E 9	3894	D 1	7814	F 8	7859	F 4		
1812	D 5	2810	C 8	2819	E 9	2829	C10	2845	C 3	2863	C 7	3801	C11	3811	E 6	3820	E 8	3830	B 7	3839	D10	3848	E 8	3858	E 3	3867	C 1	3879	D 6	3896	E 4	7815	E 7	7861	B 5		
2801	B11	2811	B 8	2820	E 9	2835	F 9	2846	C 1	2864	C 7	3802	C10	3812	E 6	3821	E 7	3831	D 8	3840	C10	3849	E10	3859	D 3	3871	D11	3880	B 8	5861	B 4	7841	C 2	7862	C 4		
2802	C11	2812	B 8	2821	E 9	2836	D 8	2847	E 2	2865	C 6	3803	B10	3813	C 8	3822	D 8	3832	E 9	3841	D 2	3850	E10	3860	E 3	3872	E11	3881	B 7	6853	D 3	7842	D 3	7863	B 2		



* Replace by bare wire for AZ8300,AZ8301,AZ8304,AZ8400

7841

1 : 2.5V
2 : 2.5V
3 : 2.5V
4 : 0V
5 : 2.5V
6 : 2.5V
7 : 2.5V
8 : 5V

7864

1 : 2.5V
2 : 2.5V
3 : 2.5V
4 : 0V
5 : 2.5V
6 : 2.5V
7 : 2.5V
8 : 5V

7871

1 : 9.2V
2 : 0V
3 : 5V

ASSEMBLY DRAWING FOR AZ8700 FROM COMPONENT SIDE
BESTUECKUNGSPLAN FUER AZ8700 VON BAUTEILSEITE

DERIVED FROM PART PC.AZ8594.P8.D1
ERZEUGT VOM PART PC.AZ8594.P8.D1

....V measured in CD play position

CD part					
TRACKING OFFSET					
Stop			3840		◈6 ↔ 10◈ 0 V ± 10 mV
TRACKING BALANCE					
Service test progr.* pos. 3 display 3--,--			3803	◈8 ↔ 2◈ Adjust to 0 V DC offset	
TRACKING GAIN					
Play with test disc 5	1200 Hz 200 mV	see Fig. 1	3816		See Fig. 1 CHX = 0,2 V/DIV CHY = 50 mV/DIV Adjust to circle
FOCUS GAIN					
Play with any normal disc	1100 Hz 700 mV	see Fig. 2	3813		See Fig. 2 CHX = 0,5 V/DIV CHY = 5 mV/DIV Adjust to circle
FOCUS OFFSET					
Play with any normal disc			3821		◈9◈ Max HF
			Check only	◈7 ↔ 2◈ U DC measured =Ux	
			3821	◈7 ↔ 2◈ Adjust to $\frac{Ux}{2}$	

* How to get in Service test programme see Service test programme

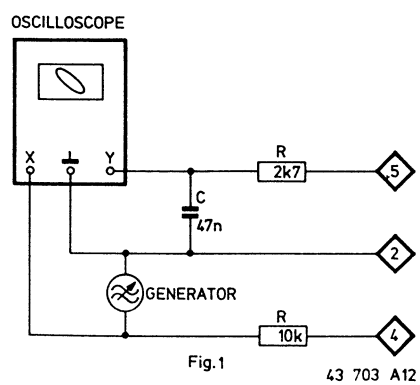


Fig.1

43 703 A12

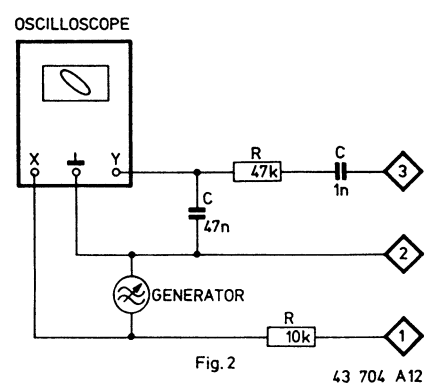


Fig. 2

43 704 A12

CD PART
SERVO DIAGRAM

PHOTO DIODE PRE AMP.

SERVO CONTROLLER

LOGIC CONTROL

RCD1 DIODE ARRAY

TRACKING BALANCE

FOCUS OFFSET

TRACKING OFF-SET

TO/FROM DECODER DIAGRAM

TO 1811

FROM 1811

TO 7861

TO 1811 INNER SWITCH

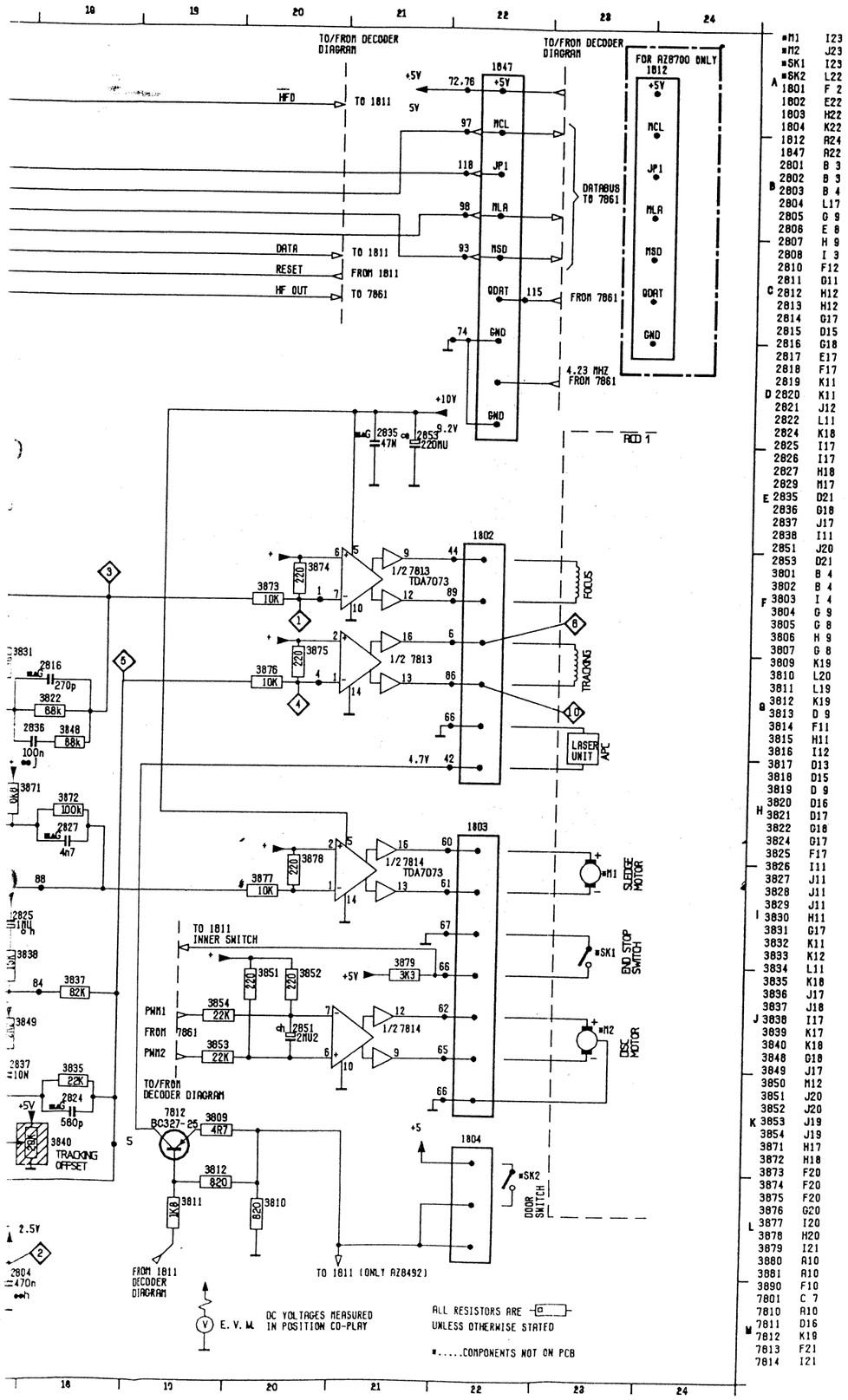
TO/FROM DECODER DIAGRAM

FROM 1811 DECODER DIAGRAM

TO 1811 (ONLY R

E. V. M.

DC VOLTAGES MEASURED IN POSITION CD-PLAY

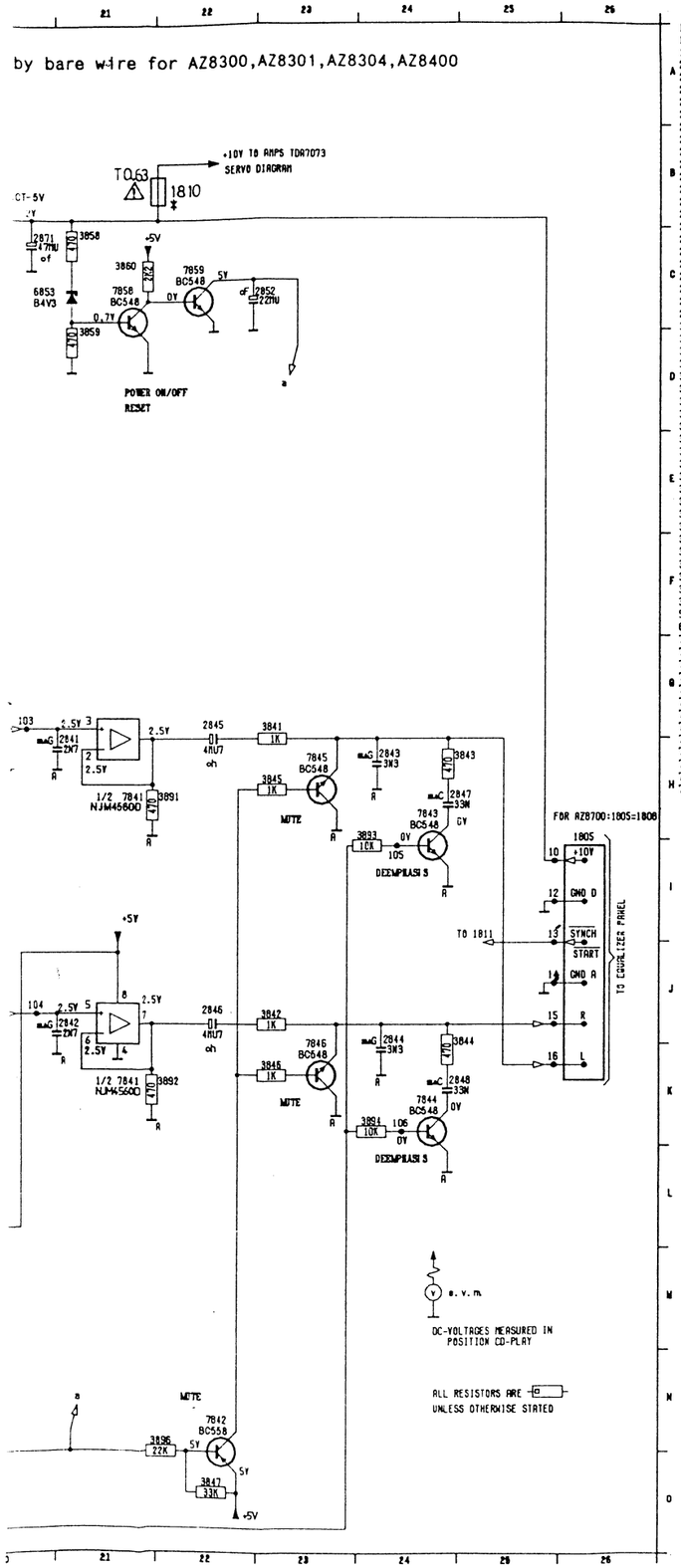

TO/FROM DECODER DIAGRAM
TO/FROM DECODER DIAGRAM
FOR AZ8700 ONLY
1812
1847
1802
1803
1804
HFD
TO 1811
DATA
RESET
HF OUT
FROM 1811
TO 7861
DATABUS TO 7861
FROM 7861
4.23 MHZ FROM 7861
+5V
+10V
9.2V
RCD 1
1/2 7813 TDA7073
1/2 7813
1/2 7814 TDA7073
1/2 7814
FOCUS
TRACKING
LASER UNIT APC
SLEDGE MOTOR
DISC MOTOR
END STOP SWITCH
DOOR SWITCH
TRACKING OFFSET
TO 1811 INNER SWITCH
PWM1 FROM 7861
PWM2
TO/FROM DECODER DIAGRAM
FROM 1811 DECODER DIAGRAM
TO 1811 (ONLY AZ8492)
2.5V
E. V. M.
DC VOLTAGES MEASURED IN POSITION CO-PLAY
ALL RESISTORS ARE
UNLESS OTHERWISE STATED
*.....COMPONENTS NOT ON PCB

CD PART
DECODER DIAGRAM

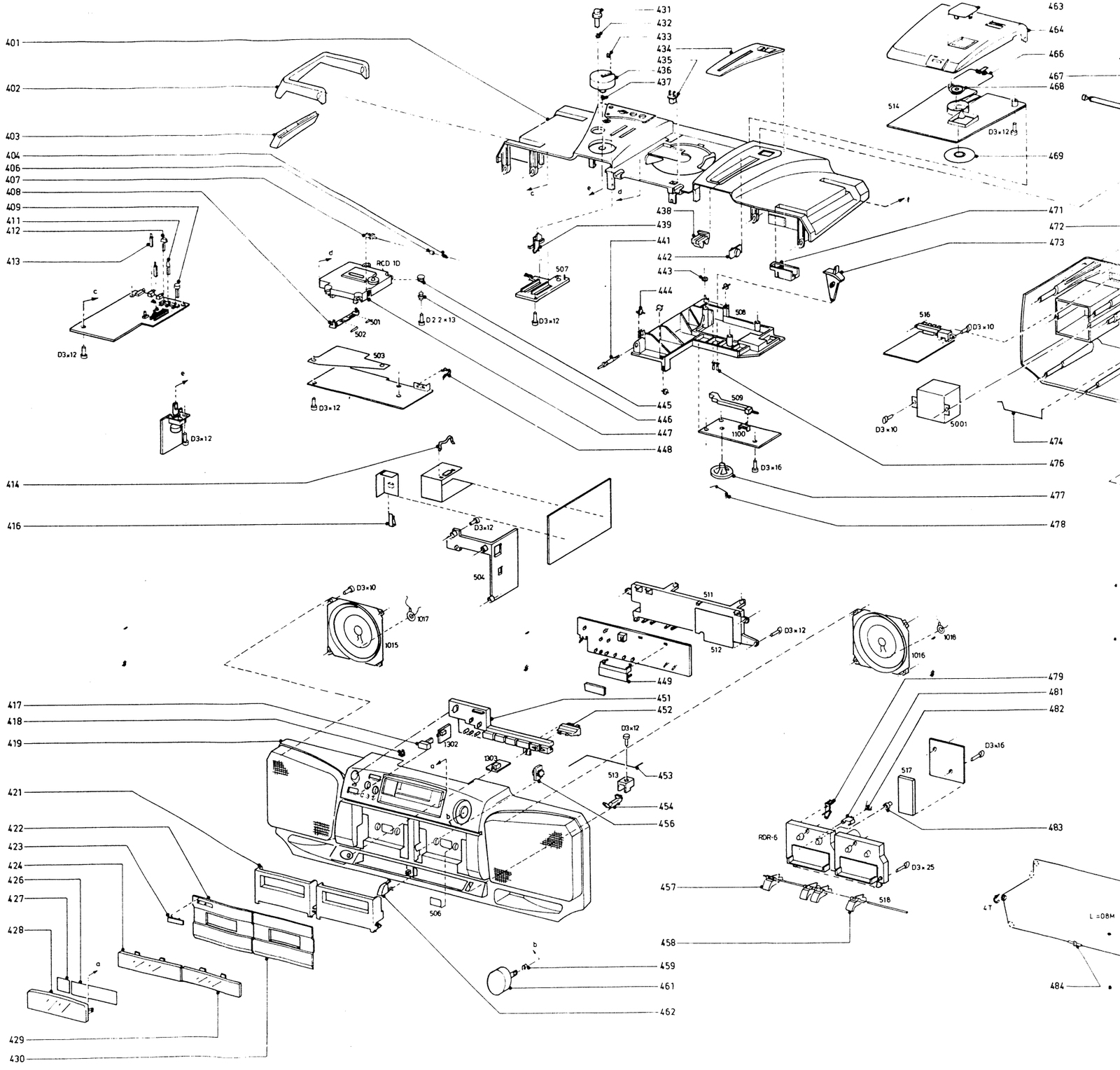
* Replace by bare wire for AZ8300,AZ8301,AZ8304,AZ8400

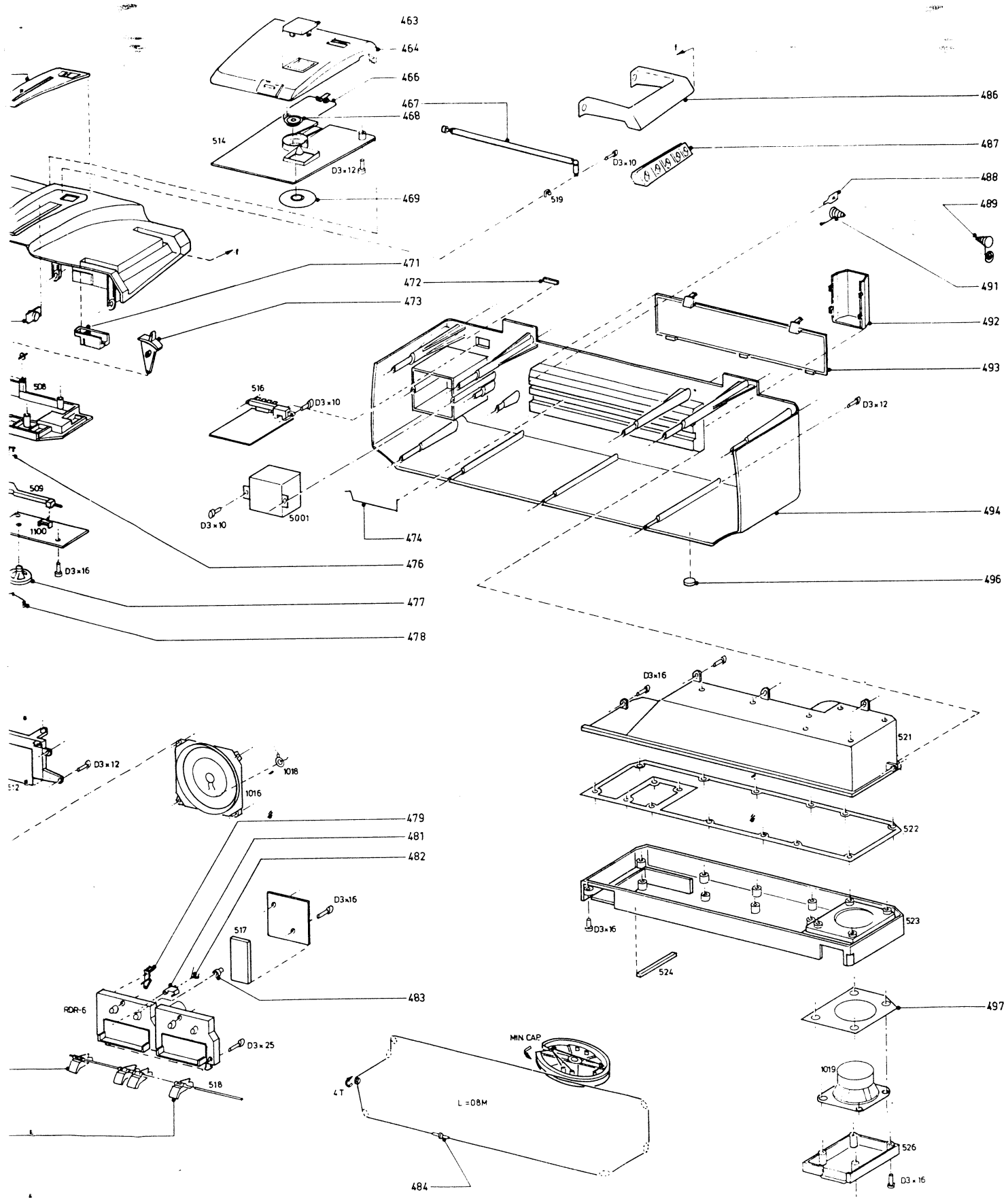
D RAM
7882 MN4264
RAM INTERFACE
7881 M50427P
PLL LOOP FILTER
DATA SLICER
PHASE DETECTOR
VCO 8.6MHz
FREQUENCY DETECTOR
TO/FROM SERVO DIAGRAM
FROM 7801
HF OUT
FROM 7810
TO 7811
TO 1803
TO 7811
TO 3811
TO 1847
TO 1804
FROM 1805
SYNC. DET. SYNC. PROTECT
EFM TIMING GENERATOR
EFM DEMODU-LATOR
SUBCODE DEMODU-LATOR
QCRC EMPHASIS
CRC DECODER
DECODE SEQUENCER
INTER-POLATOR
DIGITAL FILTER
DAC INTERFACE
TEST CONTROL
ERROR FLAG
INTERPOLATION INH.
DATA SELECT
WORD CLK
L/R CLK
DATA CLK
DIG. FILTER BYPASS
FREQUENCY DETECTOR
S/S TIMER
CV SERVO CONTROL
2/3 DE-TECTOR
PWM
S/S | BRAKE | BCON | ATT | MUTE | S/S TIMER RESET
MICRO PROCESSOR INTERFACE
TIMING GENERATOR
4.23MHz
SIGNAL PROCESSOR
SHIFT REGISTER
LATCH
TIMING
FORM
PRIORITY DETECT
DIGITAL SHIFT
ANALOG SHIFT-EXPT
MANTISSA 10 BIT DAC
V BIAS
FEEDBACK-R
DIGITAL ANALOG CONVERTER
IMPEDANCE CONVERTER
ANALOG SWITCH
1/2 7864 NJM4560D
1/2 7841 NJM4560D
7871 LM2940CT-5V
+10V TO AMPS TDA7073 SERVO DIAGRAM
POWER ON/OFF RESET
DEEMPHASIS
MUTE
DC-VOLTAGE POSITI
ALL RESIS UNLESS OT

by bare wire for AZ8300,AZ8301,AZ8304,AZ8400



1805 H26
1811 E 1
1811 E 2
A 2828 C18
2841 H20
2842 J20
2843 H24
2844 J24
2845 G22
2846 J22
2847 H24
2848 K24
B 2852 C22
2861 C18
2862 B 7
2863 B 6
2864 C 5
2865 D 4
2866 F19
2867 L15
C 2868 K17
2871 C20
2872 C19
2873 C19
3841 G23
3842 J23
3843 H24
3844 J24
D 3845 H23
3846 K23
3847 O22
3858 C21
3859 D21
3860 C21
3861 L17
3862 B 6
E 3863 B 5
3864 B 8
3865 F19
3866 L18
3867 K18
3884 K17
3891 H21
3892 K21
F 3893 H24
3894 K24
3896 N22
5861 K13
6853 C20
7841 H21
7842 N22
7843 H24
7844 K24
G 7845 H23
7846 J23
7858 C21
7859 C22
7861 C14
7862 A10
7863 F20
7864 K16
H 7871 B20





26889
04/09/90

401	4822 423 90159	434	4822 333 40426	467	4822 303 30296
402	4822 498 10398	435	4822 276 13017	468	4822 532 51871
403	4822 498 91037	436	4822 411 61743	469	4822 535 60096
404	4822 492 51724	437	4822 492 51374	471	4822 535 93163
406	4822 404 60471	438	4822 450 81179	472	Not applicable
407	4822 325 20138	439	4822 411 61742	473	4822 411 61745
408	4822 492 70156	441	4822 535 91958	474	4822 492 70229
409	4822 410 61002	442	4822 529 10257	476	Not applicable
411	4822 410 61001	443	4822 528 80907	477	4822 528 40208
412	4822 410 61003	444	4822 528 50116	478	4822 492 40854
413	4822 410 60999	445	4822 532 61103	479	4822 404 21073
414	5322 255 40397	446	4822 532 61104	481	4822 403 30772
416	4822 255 40843	447	4822 691 20596	482	4822 492 70426
417	4822 410 61006	448	4822 255 40179	483	4822 466 92641
418	4822 380 20385	449	4822 256 91745	484	4822 402 20074
419	4822 423 51058	451	4822 410 61007	486	4822 498 10399
421	4822 443 62936	452	4822 480 20123	487	4822 498 91038
422	4822 423 41099	453	4822 492 70732	488	4822 290 80313
423	4822 459 11003	454	4822 410 60615	489	4822 492 51733
424	4822 381 11212	456	4822 529 10251	491	4822 492 51734
426	4822 454 12683	457	4822 410 61005	492	4822 256 91736
427	4822 454 12685	458	4822 410 60612	493	4822 423 41102
428	4822 381 11213	459	4822 492 51374	494	4822 421 60149
429	4822 381 11212	461	4822 413 41625	496	4822 462 40683
430	4822 443 63206	462	4822 410 61004	497	4822 466 62006
431	4822 411 61744	463	4822 381 11214		
432	4822 492 51374	464	4822 444 40427	IFU	4822 736 20996
433	4822 454 12682	466	4822 492 70807		

(GB)

Safety regulations require that the set be restored to its original condition and that parts which are identical with those specified, be used.

(NL)

Veiligheidsbepalingen vereisen, dat het apparaat bij reparatie in zijn oorspronkelijke toestand wordt teruggebracht en dat onderdelen, identiek aan de gespecificeerde, worden toegepast.

(F)

Les normes de sécurité exigent que l'appareil soit remis à l'état d'origine et que soient utilisées les pièces de rechange identiques à celles spécifiées.

(D)

Bei jeder Reparatur sind die geltenden Sicherheitsvorschriften zu beachten. Der Originalzustand des Geräts darf nicht verändert werden; für Reparaturen sind Original-Ersatzteile zu verwenden.

(I)

Le norme di sicurezza esigono che l'apparecchio venga rimesso nelle condizioni originali e che siano utilizzati i pezzi di ricambio identici a quelli specificati.

		MISCELLANEOUS	
1015		SPEAKER 7W 4Ω	4822 240 30556
1016		SPEAKER 7W 4Ω	4822 240 30556
1017		BUZZER	4822 280 10222
1018		BUZZER	4822 280 10222
1019		SPEAKER 8W 8Ω	4822 240 30512
1045		SWITCH-LEAF	4822 276 12165
1100		BANDSWITCH 4P4T	4822 277 21133
1300	△	FUSE T2.5A	4822 070 32502
1301	△	SOCKET MAINS	4822 265 20287
1302		POWER SWITCH	4822 276 12571
1303		SOCKET HDPHONE	4822 267 30553
1309	△	FUSE T1.25A	4822 071 51252
1401		LCD FRD6D44 (CD)	4822 130 90762
1410		SWITCH KEY	4822 276 12276
1411		SWITCH KEY	4822 276 12276
1412		SWITCH KEY	4822 276 12276
1413		SWITCH KEY	4822 276 12276
1414		SWITCH KEY	4822 276 12276
1415		SWITCH KEY	4822 276 12276
1416		SWITCH KEY	4822 276 12276
1417		SWITCH KEY	4822 276 12276
1418		SWITCH KEY	4822 276 12276
1419		SWITCH KEY	4822 276 12276
1440		RCR-IR GP1U520X	4822 130 81254
1531		FUNCTION SWITCH	4822 276 13015
1532		MONO/STEREO	4822 276 12648
1533		HS DUBBING	4822 276 12648
1541		SOCKET MIC	4822 267 30553
1542		SOCKET CINCH CD	4822 267 30933
1592		SOCKET CINCH CD	4822 267 30933
1707		RECORD SWITCH	4822 277 20594
1810	△	FUSE T0.63A	4822 071 56309
5151		FILTER 10.7MHZ	4822 242 70249
5152		FILTER 10.7MHZ	4822 242 70249
5401		RESONATOR 6MHZ	4822 242 71854
5402		XTAL 32.768KHZ	4822 242 70938
5861		CERAM FILTER	4822 242 72565
		REMOTE CONTROL	4822 218 10378

		CAPACITORS	
2100		POLYVARICON	4822 125 20286
2105		24pF 50V	4822 122 10444
2107		20pF 50V	4822 122 10443
2132		TRIMMER 11pF	4822 125 50198
2134		PP 390pF 160V	4822 121 43705
2135		PP 305pF 630V	4822 121 51197

		RESISTORS	
3184		PRESET 10K	4822 100 20166
3327	△	NFR25 10Ω	4822 111 30508
3508		POTM 100KB X 2	4822 102 20108
3509		POTM 100KB X 2	4822 102 20108
3540		POTM 50KB X 2	4822 102 20104
3596		POTM 50KB	4822 101 21156
3778	△	NFR25 120Ω	4822 052 10478
3802	△	NFR25 4.7Ω	4822 052 10478
3803		PRESET 20K	4822 100 20589
3809	△	NFR25 4.7Ω	4822 052 10478
3813		PRESET 20K	4822 100 20589
3816		PRESET 20K	4822 100 20589
3821		PRESET 20K	4822 100 20589
3840		PRESET 20K	4822 100 20589

		COILS	
5001	△	TRANSFO' MAINS	4822 146 30947
5101		FM RF COIL	4822 156 30947
5102		FM RF COIL	4822 156 30947
5103		COIL 0.47µH	4822 157 53138
5122		MW-LW ANT ASSY	4822 158 60564
5124		SW ANT BLK	4822 156 30811
5130		MW OSC BR	4822 156 11045
5131		SW OSC BL	4822 156 31023
5153		AM IFT COIL YW	4822 156 10726
5154		AM IFT COIL YW	4822 156 10726
5155		FM DET COIL OR	4822 157 52693
5156		COIL 15µH	4822 157 53901
5400		COIL 680µH	4822 157 53809
5403		COIL 2.2µH	4822 157 62552
5404		COIL 2.2µH	4822 157 62552
5405		COIL 22µH	4822 157 52286
5406		COIL 2.2µH	4822 157 62552
5701		COIL 820mH	4822 157 51238
5702		COIL 820mH	4822 157 51238

		SEMICONDUCTORS	
6101		1N4148	4822 130 30621
6121		1N4148	4822 130 30621
6152		BA316	4822 130 30302
6153		BA316	4822 130 30302
6160		1N4148	4822 130 30621
6191		1N4148	4822 130 30621
6300		KBU4D	4822 130 80305
6310		1N4148	4822 130 30621
6311		1N4148	4822 130 30621
6312		BZX79C4V7	4822 130 34174
6313		BZX79C9V1	4822 130 30862
6314		BZX79C5V6	4822 130 34173
6330		1N4148	4822 130 30621
6331		1N4148	4822 130 30621
6332		BZX79C6V2	4822 130 34167
6333		1N4148	4822 130 30621
6401		1N4148	4822 130 30621
6402		BZX79C5V6	4822 130 34173
6403		1N4148	4822 130 30621
6404		1N4148	4822 130 30621
6407		1N4148	4822 130 30621
6464		TLG124A GN	4822 130 32472
6465		TLG124A GN	4822 130 32472
6470		TLG124 RD	4822 130 31274
6480		1N4148	4822 130 30621
6601		1N4148	4822 130 30621
6602		1N4148	4822 130 30621
6603		1N4148	4822 130 30621
6610		1N4148	4822 130 30621
6611		1N4148	4822 130 30621
6612		BZX79C5V6	4822 130 34173
6613		BZX79C5V6	4822 130 34173
6631		BZX79C6V8	4822 130 34278
6640		TLG124A GN	4822 130 32472
6701		1N4148	4822 130 30621
6702		1N4148	4822 130 30621
6703		1N4148	4822 130 30621
6704		1N4148	4822 130 30621
6705		1N4148	4822 130 30621
6706		1N4148	4822 130 30621
6707		1N4148	4822 130 30621
6708		1N4148	4822 130 30621
6709		1N4148	4822 130 30621
6710		1N4148	4822 130 30621
6712		1N4148	4822 130 30621
6713		BZX75-C2V1	4822 130 81424
6853		BZX79-B4V3	4822 130 31554
7101		2SC1047C	4822 130 60163
7102		2SA838B	4822 130 60093
7103		2SC1359B	4822 130 60092
7104		TBC548A	4822 130 40948
7151		TEA5570/N5	4822 209 81563
7181		AN7411	4822 209 71321
7260		TBC548C	4822 130 44196
7310		BD234	4822 130 61236
7311		TBC548C	4822 130 44196
7312		TBC558B	4822 130 44197
7313		AN7147	4822 209 72368
7314		TBC548C	4822 130 44196
7315		BC337-40	4822 130 41344
7316		BC327-40	4822 130 41327
7330		AN7147	4822 209 72368
7331		2SA1160B	4822 130 62388
7332		2SA1160B	4822 130 62388
7333		TBC548B	4822 130 40937
7334		BC337-25	4822 130 40981
7335		TBC548C	4822 130 44196
7360		TBC548C	4822 130 44196
7401		TMP47C620F-4492	4822 209 63364
7480		TBC558B	4822 130 44197
7481		TBC548B	4822 130 40937
7501		TBC548C	4822 130 44196
7502		TBC548C	4822 130 44196
7505		TBC549C	4822 130 44246
7551		TBC548C	4822 130 44196
7552		TBC548C	4822 130 44196
7555		TBC549C	4822 130 44246
7601		TBC558B	4822 130 44197
7602		TBC558B	4822 130 44197
7604		TBC548C	4822 130 44196
7610		TBC548C	4822 130 44196
7630		TBC548A	4822 130 40948
7631		BC337-40	4822 130 41344
7632		BC337-40	4822 130 41344
7633		BC327-40	4822 130 41327
7634		BC327-40	4822 130 41327
7635		TBC548C	4822 130 44196
7636		TBC548C	4822 130 44196
7660		TBC548C	4822 130 44196
7701		KA2224	4822 209 72491
7702		1313HA	4822 209 70288
7703		BC548B	4822 130 40937
7704		BC548B	4822 130 40937
7705		BC548B	4822 130 40937
7706		TBC338-40	5322 130 44779
7707		TBC338-40	5322 130 44779
7708		BC558B	4822 130 44197
7709		BC548B	4822 130 40937
7710		BC558B	4822 130 44197
7711		BC548B	4822 130 40937
7712		BC548C	4822 130 44196
7713		BC558B	4822 130 44197
7753		BC548B	4822 130 40937
7756		TBC338-40	5322 130 44779
7757		TBC338-40	5322 130 44779
7801		M51567P	4822 209 72814
7810		TBC548	4822 130 40938
7811		M51564P	4822 209 72815
7812		BC327-25	4822 130 41246
7813		TDA7073/N1	4822 209 61073
7814		TDA7073/N1	4822 209 61073
7841		NJM4560D	4822 209 83274
7842		TBC558	4822 130 40941
7843		TBC548	4822 130 40938
7844		TBC548	4822 130 40938
7845		TBC548	4822 130 40938
7846		TBC548	4822 130 40938
7858		TBC548	4822 130 40938
7859		TBC548	4822 130 40938
7861		M50427FP	4822 209 62371
7862		MN4264-15	4822 209 70422
7863		YM3016F	4822 209 73864
7864		NJM4560D	4822 209 83274
7871		LM2940CT-5.0	5322 209 72487